RESEARCH NOTES

The Cambodian Land Market: Development, Aberrations, and Perspectives

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Summary

In its Land Administration, Management and Distribution Program, the Royal Government of Cambodia proclaimed measures to strengthen the Cambodian land markets and tenure security. However, in the past, the country's land markets suffered severe aberrations caused by price hikes. This affected both urban and rural areas, mainly due to a rollout of urban capital. In particular, these aberrations included the purchase of land purely for speculative reasons, unused and underused plots, which effectively caused a land shortage, as well as the careless sale of land by smallholders on the one hand and land-grabbing on the other. The consequence of this has been an increase in involuntary landlessness, land-poorness, and a rising land concentration. At present, there is still some breathing space — land prices are no longer rising, or are even falling. The price level of land has slipped back to the level of 2007. However, land prices are expected to rise again from 2011 onwards. As in the past, price bubbles in rural areas are mainly expected to arise at locations with a moderate price level, good-quality land, and development expectations, particularly regarding tourism. Experts largely expect future prices to rise in the regions of Krong Preah Sihanouk/Kampot, Battambang/Siem Reap, Kampong Cham/Kratie, and Ratanankiri. Although decelerating forces are also at work now, aberrations on the land market will continue to be possible in the future.

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1 Introduction

Land disputes and a lack of access to land are considered to be two of the most severe problems in Cambodia. More than 80% of Cambodians live in rural areas. About 21% of rural households are involuntarily landless, while a further 45% are land-poor (owning no more than 1 hectare per household; Sophal 2008: 2). It is generally young married couples who are affected most. The Royal Government of Cambodia (RGC) has recognized the problem. Its vision is "to administer, manage, use and distribute land in an equitable, transparent, efficient, and sustainable manner in order to contribute to achieving national goals of poverty alleviation,

ensuring food security, natural resources and environmental protection, national defense and socio-economic development in the context of market economy" (RGC 2009). The RGC has passed a number of laws, decrees, and sub-decrees in order to obtain better control. However, the effectiveness of these measures is limited.

The land markets were in particular disarray during the hike in land prices between 2004 and 2008; land was an object of speculation. As we will explain subsequently, these developments have been counteracting the policies to improve the living conditions of smallholders (who are also an important target group for development assistance).

This article aims to outline and explain the development of Cambodia's land markets in the past decade or so. Based on these findings, forecasts will be made concerning the development of the land markets in the near future. The effects of a sustainable land-use policy intended to support smallholders will also be described in brief. Substantiation is given in a summarized form. The article does not claim to provide a theoretical analysis of the Cambodian land market, but it does report findings and data from a specific field study carried out in October 2009 in the context of the current discussion with researchers interested in this area, thus serving as a basis for further investigation.

The country's land markets in the past, present, and future 2

There is a lack of statistical information concerning the development of land prices in Cambodia. The official database only reflects a fraction of the real price, because private parties usually report incorrect transaction prices to the authorities in order to save the 4% transaction tax (cf. IMF 2009, key informant from GTZ/GIZ). The subsequent assessments have been made on the basis of statements by real estate experts from the financial sector and real estate companies interviewed in the field study mentioned above.

2.1 Land prices in urban and rural areas

a. Urban areas

In 2004, one square meter of land in a prime location in Phnom Penh cost around US\$250. By 2007, the price was eight times higher (Üllenberg 2009: 15). Table 1 (below) suggests that at first glance this price level still seems to be moderate in an international comparison.

However, this impression changes when seen against the backdrop of the economic development of various East Asian countries. Prices in Cambodia increased

In order to protect their privacy, the names of our key informants are not mentioned in the text. Some classified sources, which cannot be cited, are also noted subsequently as "key informants." More information in respect of the key informants and classified sources may be provided — if allowed by the author on request; please send an e-mail to d.loehr@umwelt-campus.de.

extensively from 2006 to 2008 (time of the elections²), but then the price hike was interrupted. In the meantime, the price level has almost returned to the level of 2007.

 Table 1: Asian countries: prices per square meter (comparison)

Rank	City/country	Square meter price (US\$)
1.	Hong Kong	16,422
2.	Japan	12,884
3.	Singapore	11,324
4.	India	10,265
5.	China	5,449
6.	Taiwan	5,251
7.	Thailand	3,072
8.	Cambodia	2,668
9.	the Philippines	2,033
10.	Malaysia	1,424
11.	Indonesia	1,381

Source: Global Property Guide (2010)

In regional conurbations (Phnom Penh, Siem Reap, Battambang), the average price development was as follows:

Table 2: Price developments in urban areas (ranges) in the past

Year	2003	04	05	06	07	1-08	11-08	09	10*
Percent	10/15	15/20	15/20	20/30	60/70	40/50	-15/20	-35/-25	-10/0

^{*}Expected price development

Source: Key informants from the real estate sector and the financial sector

The following table shows the urban regions with the highest price developments and the reasons for this:

Table 3: Urban regions with the highest price hikes

Region	Phnom Penh	Siem Reap	Sihanouk Ville	Kep/Kampot/Koh Kong
Cause	No limits on the height of buildings, high "intensity rent"	Limits on the height of buildings and intensity of use, but land scarcity caused by "APSARA" zoning	Tourism	Tourism

Source: Key informants from the real estate sector

The fact that the price hike stopped at the time of the election may partly be a coincidence (see the remarks about US monetary policy and its impacts on the Cambodian property sector in section 2.2) and partly also be caused by political factors, such as housing loan credit restrictions (Economic Institute of Cambodia 2008: vii). So far, no reliable research results exist about the importance of these various factors.

According to experts, a new price hike in urban areas is possible from 2012 on. A new "rollout" of urban money is also possible. The experts to whom we spoke gave the following price expectations for 2010 to 2012 for urban areas:

Table 4: Future price development in conurbations

Present/Forecast	Year	From	to
Present	2010	- 10%	0%
Future/forecast	2011	3%	10%
renderations and antique	2012	10%	15% or more

Source: Key informants from the real estate sector and the financial sector

b. Rural areas

The price hikes in urban areas also affected prices in rural areas; a "rollout" of urban capital was reported. Considering the price hikes in Puok, for example, the money mainly came from Phnom Penh, Siem Reap, Odor Meanchey, Banteay Meanchey, and Battambang. Some foreign investors also contributed to the development (according to a key informant from the real estate sector). Key informants estimated that roughly 80% of the investment in land was domestic. In the past, the largest price hikes occurred in the regions of Battambang, Kampong Thom, Prey Veng, and Ta Keo. While agricultural land could be bought for \$500-1,000 per ha in 2004, prices jumped to \$3,000-4,000 per ha in 2008 and then declined to \$1,500-2,500 per ha in 2009:

Table 5: Development of land prices in rural areas in the past

Region	A. Battambang	B. Kampong Thom	C. Prey Veng	D. Ta Keo
Average prices in \$/ha 2004	1,000	500	500	500
Average prices in \$/ha I/2008 (before elections)	4,000	3,000	3,000	3,000
Average prices in \$/ha 2009	2,500	2,000	2,000	1,500

Source: Key informants from the real estate sector

The international comparison suggests this figure is relatively low, however, due to a low level of agricultural productivity (the present net value of arable land is also still at a low level).

Considering the rural areas, the subsequent table (6) shows that future price hikes are expected in the following regions in particular:

- Krong Preah Sihanouk and Kampot (current price per ha: \$1,000–2,000)
- Battambang/Siem Reap (current price per ha: \$1,000–2,500)
- Kampong Cham/Kratie (current price per ha: \$1,000–3,000)
- Ratanankiri (current price per ha: \$1,000–3,000).

Table 6: Expectations for future price hikes in rural areas

Region	I. Battambang / Siem Reap	II. Ratanankiri	III. Kampong Cham / Kratie	IV. Krong Preah Sihanouk and Kampot
Type of land / agricultural use	Good-quality agricultural land (rubber, cassava)	Good-quality land for plantations (rubber, cashew, cassava, etc.)	Good-quality land for plantations, interesting for investors (rubber plantations, tobacco, cassava, cashew, etc.)	Low-quality land for agriculture
Development expectations	Improvement of infrastructure and cultural tourism in Siem Reap also affects Battambang	Eco-natural tourism, but also natural resources such as iron, manganese, and aluminum; generally "fourth development pole" of Cambodia (after Phnom Penh, Siem Reap, and Sihanoukville)	Small industry (light industry, supplier, low power motorbikes	Development expectations mainly because of the growth of the city, beach tourism, eco tourism resort, and infrastructure development and hydro electricity supply
Axis / infrastructure	National Road No. 5 and 6 A	New section of National Road No. 78 built between O'Pong Moan and Banlung Town in Ratanankiri province (*)	National Road No. 7, connection to Sihanoukville and Thai border	National Road No. 3 and 4
Countries economically connected	Thailand	Vietnam	Vietnam	
Current price / ha	\$1,000-2,500	\$1,000–2,000 to \$3,000	\$1,000–3,000	\$1,000-2,000
Development expectations (ranked)	2	4	3	1

Source: Key informants from the real estate sector

^(*) The construction of the road is being financed with a "concessional loan" of \$73 million from China, which is pursuing economic interests in the Lao PDR; cf. Phnom Penh Post, November 13, 2009: 7.

According to key informants from the real estate sector, land prices are expected to rise, especially in regions with high-quality agricultural land with good road connections, which also have development expectations (mainly tourism).

2.2 Reasons for the past hike in land prices and conclusions regarding future development

Basically, the value of agricultural land depends on its fertility, development expectations, and infrastructure (especially its proximity to main roads). Furthermore, certain special effects have to be considered for Cambodia.

a. Demand side

The following factors are the most important ones causing an increase in the demand for land:

Foreign money, trade, and foreign direct investment (FDI): In the past, purchasing power was pushed by foreign money, which came from UN peacekeeping forces, FDI, and Cambodian nationals living in exile (according to GTZ/GIZ consultants who were interviewed). Of all of these factors, FDI is most likely to be of particular importance in the future (cf. Üllenberg 2009). From 1996 to 2006, it grew by 19%. Of the total amount of FDI in 2008, namely \$10.89 billion, only around 1% was allotted to agriculture (RGC 2010). In our view, this small share also needs to be seen in the context of the conditions of granting Economic Land Concessions (ELCs; see below), since FDI in agriculture is mostly based on ELCs. There is no reliable information available about the detailed structure of FDI. Obviously, agricultural commodities and perennial tree crops are of importance (according to information from GTZ/GIZ consultants). Although the website of the Ministry of Agriculture, Forestry and Fisheries (MAFF; RGC/MAFF 2010) does not provide any information about the shareholders of the ELC-holding companies,³ it seems that Asian countries are the most important investors — especially China, Korea, and Malaysia (Üllenberg 2009: 22). Rubber seems to be particularly important to China (in view of its growing number of trucks) and Vietnam. (According to information provided by a manager of a Vietnamese rubber development company, Vietnam has the strategic target of planting some 100,000 ha of rubber in Cambodia.) In recent times, there have also been reports about investors from the Middle East (Kuwait – Madra 2008, Qatar – Mcleod 2009; Üllenberg 2009: 26-27), which may be interpreted as exporting "virtual water" (Warah 2009).

Due to better business expectations for the coming years, the international commodity markets are already experiencing an upswing. The price for crude oil in particular is rising again. This may affect the demand for agro-fuels (which are close substitutes for fossil fuels) and rubber (natural latex is a substitute for synthetic

According to The World Bank (2010: 40, table 2.2.), the RGC "had committed to updating the data base in 2009 but did not do so."

latex). Nutrition patterns are also changing, particularly in China. The greater demand for meat is creating more demand for land, both inside and outside of China. FDI can be policy-driven or economically oriented. In many cases, it is driven by political and/or strategic factors, e.g., in order to achieve more food and energy security in the investors' countries or to obtain better control of the value chain. With FDI, markets are replaced by hierarchy ("vertical integration"; Williamson 1985). Such vertical integration may contribute to overcoming the obstacles created by

However, despite the growing importance of FDI, to date, it is still the domestic companies that play the most important role in large-scale farming. Table 7 provides a deeper insight into the structure of FDI and the importance of ELCs.

imperfections of other factor markets, especially marketing and access to finance

Table 7: Foreign direct investment, 2008/2010

(see section 4 for more details: The World Bank 2010: viii-ix).

2008	in ha (rounded off)	Reference to
Total area of Cambodia	18,103,500	
Agricultural land	5,356,000	approx. 30% of the total area
Arable land	3,807,000	approx. 21% of the total area
Economic Land Concessions (ELCs) in 2010	1,374,000	approx. 26% of the agricultural land, approx. 36% of the arable land
Thereof: FDI approx.	300,000	approx. 22% of ELCs
Of the FDI (as of 2006)		
Wood production	108,000	approx. 36% of FDI
Agro-fuels, esp. Jatropha	91,000	approx. 30% of FDI
Food production	66,000	approx. 22% of FDI
Others	35,000	approx. 11% of FDI

Source: Mekong Network Project (2010); RGC/MAFF (2010)

More regional economic integration (as promoted by the World Bank as a strategy; The World Bank 2009: xvi-xvii), increased cooperation within the ASEAN group, the Chinese-Asian foreign trade zone (put in place in 2010), and the WTO mechanism will all promote the trends described above (Billmeier 2009; Economic Institute of Cambodia 2008: 44). Unlike smallholders and landless or land-poor people, domestic and foreign agro-business companies can be considered as powerful, well-organized actors that work closely with the government. They may also be the strongest group in the future competition for land (cf. Olson 1971). If the trends described in this report are realized, these powerful actors will try to get more land. Not all investors follow a social responsibility code. This means that there is a certain danger that the losers will be the poorly organized groups (cf. GRAIN 2008).

This leads to a conflict of goals for the government: on the one hand, more FDI and exports are needed in order to gain access to technology, capital, and foreign currency, while on the other, the social bias could be increased.

Increase in GDP: Rising GDP was another reason for the growing demand for land until 2008, as table 8 shows:

Table 8: GDP – real growth rates

Year	GDP — real growth rates		
2003*	8.5%		
2004*	10.3%		
2005*	13.3%		
2006*	10.8%		
2007*	10.2%		
2008*	6.7%		
2009**	- 2.7%		
2010**	4.3%		
*: past	**: forecast		

Source: * Global Finance (2010); ** IMF, according to http://www.khmerlovekhmer.org/?p=33343

The level of per capital income doubled from 1997 to 2007 (from \$285 per head to \$593 per head; The World Bank 2009: 3). This effect was suspended in 2009 due to the economic crisis. However, the economy has been growing again since 2010... Nonetheless, the World Bank has doubts about the sustainability of Cambodian economic growth, because it heavily depends on a small number of industries (clothing, tourism, construction, and agriculture) as well as in FDI. Hence, Cambodia is highly vulnerable if global economic slumps occur (The World Bank 2009: x).

Demographic development: Another factor that is important in connection with the demand for land is the population growth in recent years, particularly between 1980 and 1990. The population of Cambodia grew by around 30% between 1990 and 1998. Its annual population growth was 1.8% between 1998 and 2004, while more recently it was roughly 1.54% (RGC/National Institute of Statistics 2009). The distribution of the population throughout the country was very unequal at the time, however, and still is. The average size of agricultural cropland for smallholders is currently some 1.5 ha (according to information from a GTZ/GIZ advisor). Statistically, however, there is roughly 1 ha of arable land available for each of the 2.8 million households in Cambodia if the officially reported ELCs⁴ are subtracted from the total amount of arable land (3.8 million ha; RGC/National Institute of Statistics 2009). The land-per-household ratio trend is sinking due to the growing size of the population and the granting of more ELCs (cf. Sophal/Sarthi 2002: 5). Hence, involuntary land poverty can only be reduced if more jobs are created outside the farming sector (i.e., in the secondary and tertiary sectors). The urbanization tendencies will also contribute to a decrease in the demand for rural

These are around 1 million ha, most of which is unused land, without taking mining and forestry concessions into account.

land (The World Bank 2009: 6). The other side of the coin, however, is higher demand for land and higher prices in the urban areas.

Monetary policy: Cambodia is a highly dollarized economy. From 2003 to April 2009, 96% of all deposits were made in foreign currencies (mainly US dollars). The Cambodian riel is used only as change, for small deals, or — and this is the most important use of the riel — for paying taxes and doing business with the public sector. The foreign deposits (mainly US \$) grew at high rates, particularly between 2005 and 2007, and highly correlate with the hike in real estate prices (in contrast to the growth in GDP). For investors, the real interest rate (12-month US \$ deposits) was very low before the price hike, and it was even negative when the price increase peaked (at -2.2% in 2007; cf. Economic Institute of Cambodia 2008: 19; our own calculations). Hence, we may conclude that the real estate price bubble that existed until 2008 (see below) can also be interpreted as a spin-off of the US real estate bubble, which was pushed by monetary policy to a high degree:

Table 9: Price hikes as a spin-off of the US real estate bubble

Increase in	12/2005	12/2006	12/2007	12/2008
foreign deposits	17%	45%	79%	1%
real estate prices in urban areas	15%	20%	60%	25%
GDP	18%	16%	18%	6%

Source: Federal Reserve Bank (2006); The World Bank (2009), table 11; Williams (2010); IMF (2009); our own calculations

We weight this effect higher than the increase in GDP, which was less correlated with the development of real estate prices (cf. IDW/ZEW 2009: 129-130; table 9). This statement is supported by the fact that — due to high prices — the rates of return on Cambodian real estate investments are relatively low compared with other countries in Southeast Asia. Hence, the land price development in the future may also depend largely on the policy of the American Federal Reserve Bank (FED) as long as no de-dollarization is put in place (cf. The World Bank 2009: 4, 9). Since the economic problems in the US (low growth, the budget deficit, etc.) mean that the FED monetary policy will not be restrictive in the coming years, the danger of monetary alimentation of a real estate bubble in Cambodia will persist.

Financial sector: The financial sector in Cambodia has developed substantially in recent years (Economic Institute of Cambodia 2008: chapter 6). The commercial banking sector has grown at annual rates of between 25 and 35% in the last four years, although there was a drop in growth rates in 2008 (only 5-15%; Billmeier 2009). Apparently, this decrease also occurred due to credit restrictions caused by new regulations. The financial sector is still comparatively weak in Cambodia, however. A lack of attractive financial investment alternatives was one more reason for the price hike in real estate markets. Additionally, many investors wanted to see

high returns in a short time. This speculative mentality was also supported in the past by careless granting of loans coupled with low credit-check standards. According to a key informant from the financial sector, the liquidation of land as collateral was often more profitable for banks than a proper debt service. Granting loans for speculative purposes was generally more profitable than loans for productive investments. In the future, the planned opening of the stock exchange in Phnom Penh (sponsored by the Korea Stock Exchange) will hopefully provide an investment alternative for speculative investors. Our key informants were skeptical about this, however — the stock exchange could mainly serve as a tool by which the RGC can issue government bonds. Furthermore, setting up the stock exchange and understanding the mechanism takes time. The opening is planned for July 2011; it was delayed due to some disputes (regarding architecture, for example).⁵

b. Supply side

The factors that have been responsible for a decrease in the effective supply of land took effect in regional terms. The following are important aspects:

ELCs: Agribusiness investments are often carried out using ELCs. ELCs (according to Art. 49 of the Cambodian Land Law 2001) are granted to agro-industrial companies for large-scale agro-industrial plantations or other types of economic exploitation (United Nations 2007). The lease period is generally 70 years (RGC/MAFF 2010). Unlike full property titles on land, foreign direct investors may also apply for ELCs (see above). By March 2010, about one million hectares (which is approx. 26% of the total arable land or some 19% of the agricultural land) in the form of officially reported ELCs with more than 1,000 hectares had been given to 68 firms (cf. RGC/MAFF 2010, table 7).

In addition, 47 companies in nine provinces received ELCs of less than 1,000 hectares. ELCs covering 0.4 million hectares have also been pre-approved, are pending, or have not yet been officially disclosed or listed (according to key informants from GTZ/GIZ, RGC/MAFF 2010, and our own calculations). The aforementioned data does not include the 130,000 ha of ELCs granted to the governments of Kuwait and Qatar in 2008. In exchange for this land, Cambodia expects a \$200 million investment by Qatar; Kuwait intends to grant a \$546 million loan (Üllenberg 2009: 26) and wants to finance \$350,000 for an irrigation project (Ferrie 2009). In talks with several Asian and Middle Eastern governments, Cambodia hopes to receive as much as \$3 billion in agricultural investment in return for millions of hectares of land in ELCs. The data stated here does not include huge amounts of additional ELC areas that may be provided for Indochina Gateway

According to information provided by a key informant from the financial sector, the management of the Canadia Tower signed a contract with the Ministry of Economy and Finance in early November 2010 in order to rent the 24th and 25th floors of the tower to the Cambodia Stock Exchange.

According to a key informant from the real estate sector, it is possible to obtain Cambodian citizenship (in order to get full property titles) by paying around \$500,000.

Capital Ltd., an Australian investment fund (Wilson 2010: 8). However, according to key informants, this fund mainly intends to take over existing ELCs. All in all, the actual amount of granted, pre-approved, and pending ELCs is 1.4 million hectares (some 36% of the total arable land or 26% of the agricultural land; cf. table 7). As of March 2010, around 29% of the granted ELC area of 1.0 million ha was leased by foreign companies (table 7). ELCs are granted at favorable conditions. The royalties for ELCs are calculated on the basis of production, and since most of the land has not yet been used for agriculture, little public revenue has been generated (RGC 2000: Supreme National Economic Council 2007: 13). This may also explain why FDI in the agricultural sector represents the smallest share of total FDI (see the comments on FDI above). Despite that fact that unused ELCs can be cancelled during a 12-month period, as stated in Art. 62 of the Land Law (this also holds true in the event of other failures to fulfill the conditions), almost no ELCs have been withdrawn by the RGC for a long time (United Nations 2007: 6, annex 2; interview with GTZ/GIZ advisors). By March 2010, nine ELCs in five provinces with a total area of 76,690 ha had been cancelled. New ELCs with a total area of 115,174 ha had been granted, however (RGC/MAFF 2010). If more than one third of the arable land or some 24% of the agricultural land is taken out of use by means of underused ELCs, this will cause a shortage of the effective supply of land. The intensity of this effect on land prices is as yet unknown, however (see section 3.2 for more details). The existing shortage could intensify if more ELCs are granted in the future that are kept unused. Furthermore, the shortage is increased by hydropower projects and

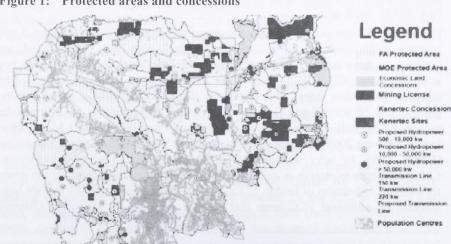


Figure 1: Protected areas and concessions

Source: AltMapCambodia (2009). MOE: Ministry of the Environment; FA: Forest Administration

mining concessions (approx. 1 million ha; see figure 1 below), which are often illegally used for logging and plantations. Land disputes and impacts on natural resources are just a few of the consequences.

Zoning: APSARA zoning, which prohibited development and land conversion in the municipalities of Khnat, Tuek Vil, and extensive parts of Doun Kaev, caused a particular reduction in the effective supply of land. The demand for land shifted to other areas near the zoned land with more favorable development expectations (particularly Krabei Riel, which is near Khnat and Tuek Vil). From 2004 to 2008, the price of low-quality land increased fivefold. In Doun Kaev, the remaining 20% of the land not being zoned by APSARA was almost completely sold out. This resulted in a price hike (personal interviews with GTZ/GIZ consultants). If the planning system is developed in the future, similar effects may occur.

c. Conclusions

Considering the driving forces behind the supply and the demand side, price hikes are also possible in the future. Nonetheless, in the near future, the general increase in prices is likely to be more moderate than in the past. Some regions may see an accelerated price development, though.

3 The effects of land-market aberrations on sustainable land use

3.1 Price hikes, land concentration, and social impacts

At the start of privatization, the distribution of land was carried out according to family size and the availability of land. The distribution often followed a "first come, first served" principle. In most cases, households did not get proper land titles. The titling process has progressed considerably since then: some 1.7 million plots have now been registered, and around 1.25 million land titles had been allotted by November 2009 (Üllenberg 2009: 14). With regard to Social Land Concessions (SLCs), the RGC distributed 34,800 ha of land to 14,500 poor families in 14 provinces in 2009 alone, and poor and disabled war veterans have received more than 20,000 ha of land since 2007. However, the registration of an additional ten million parcels is still pending in order to formally establish the land tenure security that is envisaged. To date, some 80% of Cambodian territory is still state-owned (information from GTZ/GIZ advisors). This data includes the above-mentioned concessions for agriculture, forestry, and mining (see figure 1).

Despite the land reform, inequality regarding the possession of land has risen continuously since 1989. While the land distribution was almost equal at the start of the reform, current inequality is very high – also in comparison with other South-

APSARA stands for "Authority for the Protection and Management of Angkor and the Region of Siem Reap."

Table 10: Land distribution in Cambodia – international comparison

Country	Gini coefficient
Thailand	0.41
Indonesia	0.49
Malaysia	0.51
India	0.55
Cambodia	0.65

Gini coefficient: 0 = complete equality, 1 = complete inequality

Source: The World Bank 2007: x, figure 8.

east Asian countries (the Gini coefficient of land distribution in Cambodia was 0.65 in 2007; cf. table 10).

An Oxfam GB survey (2007) also gave an insight into the consistency of land ownership: the main landowners are businessmen (31%), high-ranking officials (with the title "His Excellency," 23%), so-called "okhna" (a title given as a reward for financial contributions of more than \$100,000), high-ranking military officers (generals, 15%), and members of the National Assembly (8%).

Our own calculations, which were arrived at using a rough concentration ratio, indicate that the concentration process moves forward at a high rate at the beginning of the price hike. In a later stage, when the price level of land is already comparatively high, the concentration process seems to weaken. Taking the price level of plots as an indicator of the previous price dynamics, the number of land transfers seems to be connected to the intensity of the price hike.

Not only private property is affected by land concentration, but also ELCs. The average size of the ELCs that were granted before 2004 was 31,593 ha, and while it was around 7,940 ha after that date, the overall average size is still 14,200 ha (our own calculations; see also table 11 below).

Hence, a great deal of the ELCs larger than 10,000 ha were already granted before the Land Law was promulgated (2001). Since 2005 (when the Sub-Decree on Economic Land Concessions came into force), the average size of ELCs has been decreasing. According to MAFF, seven companies possess ELCs with more than the allowed 10,000 ha (2010). However, ELCs that are several times the maximum size stated in the directive have also been reported (several ELCs belonging to the same companies, or neighboring ELCs belonging to different companies that are part of the same group), e.g., in Kratie province (information from GTZ/GIZ consultants and managers from ELC-holding companies). Moreover, some 36 of the concessions with a size of more than 1,000 ha have been allotted to foreign companies, prominent politicians, or businessmen (United Nations 2007: 20).

The flip side of the concentration process involves land disputes, displacement of local farmers, encroachment problems, and suchlike (The World Bank 2007: 14;

The author is willing to make his data available to other researchers on request.

Table 11: Size of granted ELC and intensity of use⁹

ELC (ha)	Usable area (ha)	In percent of total ELC area	Companies (*)	Average size (ha)	Used or in preparation for use (ha)	In percent of total ELC area
10,001 -	535,339	55.44%	7	76,477	13,772	2.57%
8,001 - 10,000	237,312	24.58%	25	9,492	31,843	13.42%
6,001 - 8,000	120,065	12.43%	17	7,062	5,965	4.97%
4,001 - 6,000	50,863	14.71%	10	5,086	7,969	15.67%
2,001 - 4,000	16,010	7.35%	5	3,202	4,980	31.11%
Up to 2,000	6,070	5.88%	4	1,518	1,895	31.22%
Total	965,659	100.00%	68	14,200	66,424	6.88%

Source: RGC/MAFF 2010; our own calculations.

information from GTZ/GIZ consultants interviewed). Access to land is a basic need in an agricultural society. From a social point of view, the concentration process is also criticized because small-scale farming is supposed to create more jobs than large-scale farming. In the opinion of the experts interviewed, this certainly holds true as a tendency, but it differs widely due to the scope in substituting capital for labor. For instance, oil-palm and manual sugarcane farming may generate 10 to 30 times more jobs per hectare than large-scale mechanized grain farming (The World Bank 2010: 28). Considering the trends described in section 2, it is to be expected that a trend in favor of land concentration will continue from 2011 on.

3.2 Efficiency of land use: land speculation and underused plots

The efficiency of agricultural land use in Cambodia can be considered to be low.

Unused and underutilized land: In Cambodia — as in many developing countries smaller plots are used comparatively more efficiently than large plots. According to the Oxfam GB study, 98% of the sites smaller than one hectare are cultivated, compared with only 71% of sites larger than 3 ha (Oxfam GB 2007). This also holds true for ELCs: the findings of the World Bank, which are basically confirmed by table 11 and key informant interviews, reveal that only about 10% of the areas granted as ELCs are actually in use (cf. also Sothath/Sophal 2010, 52; Üllenberg 2009: 15). Such statements have to be carefully scrutinized, however, because there is no common definition of what exactly "in use" or "not in use" means (according

In RGC/MAFF 2010 only 58 companies can be detected. Only those ELCs that could be detected with a high degree of certainty are marked as being in use or prepared. Most of the ELCs larger than 10,000 ha were granted before the Land Law was passed.

to GTZ/GIZ consultants). The data that is available is insufficient and often contradictory. In many cases, the buyers allow the former owners to continue to use the land. When this happens, it appears that the users no longer make any investments, however. Normally, the bought land is not rented out, because the new owners are afraid that the tenants will contest their property rights after a certain period of use. As far as ELCs are concerned, many of them are obviously not rented in order to cultivate them immediately. Instead, ELCs apparently often serve speculative purposes (although the ELC contracts require the confirmation of the government for a transfer of the ELC) or because the ELC-holders simply do not have access to the necessary capital to put the land to use (interview with a GTZ/GIZ advisor). As mentioned above, the ELC fees are low and fixed according to production. Currently, fees are between \$0 - 10 per year and hectare (RGC 2000; Üllenberg 2009: 15), which is not enough to create any economic pressure to use the land. Furthermore, for some plantations (such as rubber, acacia, and eucalyptus, which take longer to grow before they can be harvested), a tax holiday is granted (interview with a CIM advisor).

No comprehensive land taxation: In order to intensify the use of land, a tax on unused land was introduced. However, this tax is not levied in a comprehensive way (IMF 2009: 24). In order to avoid discussions about when land is in use and not in use, land should be taxed without considering the actual use to which it is put — it should be a tax on imputed proceeds. Furthermore, a tax rate of 2% on the land value as it is assessed by the "Land Committees" is not enough to avoid any aberrations if price hikes of 10 to 60% occur (as has happened in the past). For these and other reasons, a site-value tax could be levied on the value of unimproved land, without regard to buildings and fixtures. Hence, an efficient use of plots is not discouraged and does not distort the way land is used, as a compound tax base does (cf. Evans 2004). The rate of a site-value tax should be fixed without being changed according to the actual use of the site. A fixed tax rate always results in the same tax burden for the owner. The owner of the land cannot avoid the tax if it has the character of a fixed cost. The only way to lower the effective burden of the tax is to use the site efficiently. Furthermore, fixed costs can hardly be shifted onto tenants' shoulders; the owner of the site (or the ELC-holder) has to bear the tax burden. In order to achieve the intended effects, the tax rate should not be too low. However, with the launch of the new property tax, which came into force in January 2011, the RGC missed an opportunity to encourage higher efficiency in the use of land, since the tax rate was only set at 0.1%. The tax base comprises the value of the land including any improvements that may have been made to it. Among other things, tax exemptions are made for agricultural land, which also includes ELCs (Laysim 2010).

Size and efficiency: It also appears that smaller ELCs (up to 6,000 ha) are used comparatively more efficiently than larger ones (cf. table 11). However, most of the area is granted as large ELCs. As far as we were able to determine, at least eight

ELCs are seriously affected by encroachment problems (RGC/MAFF 2010). The estimated number of unreported cases is certainly much higher. Encroachment makes efficient use of the ELCs difficult, even if the land holder wants to use them. In many cases, these problems have also emerged because the required procedure (e.g., Social Impact Assessments and Public Consultations) has not been complied with (United Nations 2007: 10).

Hence, there are many sites that are left unused, and the de facto supply of available land for smallholders has also decreased. It could be assumed that such shortages supported the price hikes in the past, but the intensity of such effects is unknown. If oil and commodity prices rise again (which is happening at the time of writing this article), ELCs will probably be used more efficiently. On the other hand, land-dispute problems such as dislocation are likely to be boosted.

3.3 Ecological aspects

In practice, small-scale farming seems to be more sustainable than large-scale farming. Regarding perennial tree crop plantations, for instance, three major tree crops that are now being grown in Cambodia using ELCs are not native to Asia (eucalyptus comes from Australia, rubber from South America, and oil palm from Africa). If these trees are planted in large-scale agro-industrial monocultures, they may drastically reduce local biodiversity and serve as barriers to normal migratory and dispersal patterns followed by endemic fauna and flora in surrounding areas (Hansen/Top 2006; key informants). This affects biodiversity, it may cause soil degradation, and it can also lead to food security issues (Eswaran et al. 2005). In contrast, it may be possible to reduce these risks if trees such as oil palms are cultivated by smallholders, as in other Southeast Asian or African countries (in the opinion of a GTZ/GIZ advisor). With family farming and a high degree of freedom for the farmers, the variety of plantations is likely to increase. Additionally, the negative impact of family farming on the local water supply and other farm-related issues is weaker than in industrial farming.

On the other hand, the ecological risks of plantations may be mitigated by intercropping, multicropping, forestation, and other similar steps. In some business models (particularly outgrower schemes), intercropping undertaken as "planned biodiversity" could help to mitigate the negative ecological impacts; from an economic point of view, such solutions may even be essential (as it takes several years until rubber can be harvested, for example). Certification systems may help to make plantations such as oil palm more sustainable (Seegräf et al. 2010). Hence, plantations may also be managed in a sustainable way. A comprehensive and enforceable institutional framework to achieve this is not yet in place, though.

4 Outlook: taking pressure from the land by developing the value chain

Cambodia is an agriculture-based country. Almost all its agricultural land has already been distributed. Its rising population, the thirst for agro-fuels, the production of food supplies, and other developments will cause the demand for rural land to continue in the future (Spieldoch/Murphy 2009: 42). There is a large gap between actual and potential yields, however (The World Bank 2010: 63). A combined strategy approach, focused on the development of partnerships between agribusiness and smallholders on the one hand and the development of value chains on the other, is actually being discussed by development-aid organizations from different countries (particularly the German GTZ/GIZ and French AFD) in order to ease the pressure on land.

a. Development of partnerships

The Royal Government of Cambodia has decided "to implement partnership between small and large-scale plantation holders, and cooperatives in agricultural production, and between economic land concessions and social land concessions in order to generate employment opportunities and creating market[s] for local residents" (RGC 2009). The Sub-Decree on Economic Land Concessions (RGC 2005) also stresses "any linkages and mutual support between social land concessions and economic land concession" as an evaluation criterion (Art. 5).

Basically, agriculture has few economies of scale, implying that a range of production forms can coexist (The World Bank 2010: 20). Smallholder farming is normally based on horizontal coordination (market) and the use of labor, whereas industrial farming stresses the input of capital and vertical integration. Although smallholder farms are considered as being at least as productive as large estates, industrial farming does have some advantages: the large-scale agriculture particularly emerges where vertical integration of operations allows large firms to overcome the obstacles created by imperfections of other factor markets better, especially marketing and access to finance (The World Bank 2010: viii-ix). Processing and distribution, in particular, are characterized by significant economies of scale that have given rise to consolidation and often high levels of industry concentration. Large international agricultural companies may also deal with deficiencies in infrastructure better. If these advantages are shared (e.g., by using outgrower schemes), the benefits may be considerable in theory. Smallholders may get better access to input in order to lower the gap between the actual and the potential yields. Some firms (particularly Vietnamese rubber companies) have already demonstrated a serious interest in joining such partnerships, especially in order to avoid land disputes and to bind a qualified workforce (this information was provided by a GTZ/GIZ advisor).

However, experiences on the part of other countries (especially Thailand) show the risk of failure for both sides, particularly with respect to outgrower schemes (cf.

Sothath/Sophal 2010; Sriboonchitta/Wiboonpoongse 2008: 3). Furthermore, there is basically a great deal of distrust between smallholders and agribusiness. Land conflicts (namely evictions) and violation of human rights are a matter of concern here (the NGO Forum of Cambodia 2009: 18). These concerns are not without cause. For instance, a lower recognition of customary land rights increases a country's attractiveness with a view to land acquisition, according to the empirical investigation conducted by the World Bank (The World Bank 2010: 38). Bringing smallholders and agribusiness together is a challenge for good governance, which is still lacking in Cambodia. Indeed, NGOs look critically at such kinds of approaches.

b. Development of the value chain

However, partnership approaches are also promising in order to develop the value chain. There is a need to strengthen the chain simply because of rising quality requirements on the part of consumers, which go hand in hand with higher incomes. Furthermore, a developed value chain may provide income-creation possibilities beyond the agricultural core sector and take the pressure off land.

The value chain has severe shortcomings in Cambodia, however. Due to low labor costs, farming, which is at the starting point of the value chain, may be considered competitive. Other elements of the value chain, such as transport, are still expensive. The chain is insecure in some regards (e.g., interruptions occur if rice mills are "overbooked"). Processing is hardly developed, and distribution is unstructured (information from advisors and consultants from GTZ/GIZ, CIM, and SES).

The process of strengthening the value chain may either be driven by the demand side or by the suppliers. If it is the demand side that is organizing the value chain, then negative impacts on the smallholders are possible. The demand side comprises powerful international "global players" such as Nestlé and Unilever, but also powerful regional supermarket chains such as Lucky Supermarkets. Not only do the global players cited have to be considered in this regard, but companies from northwest Thailand and southern Vietnam do, too, according to an agricultural expert from SES. If the demand side is organizing the value chain, parts of the chain could also be located in other countries (e.g., Thailand or Vietnam; The World Bank 2009: 8; key informant from CIM).

The supply side could only structure the value chain successfully if cooperatives were used (in order to provide purchase services and loans at acceptable conditions, processing, distribution, and marketing assistance) or as a countervailing power to big agribusiness companies. Despite the obvious necessity of cooperatives, Cambodians' experience of forced collectivization means that their acceptance is likely to be a problem. Successful cooperatives can only be put in place "downside up." Furthermore, in our view, the relevant Royal Decree has to be revised (RGC 2001; this decree has obviously been created using a "copy and paste" technique from a developed country). Actually, a draft law for agricultural cooperatives has already been prepared. If other legal forms are used in order to achieve the targets

mentioned, the liability ought to be limited, since the companies bear any operative risks there might be. Corporate governance would have to be designed carefully in this case.

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