



Centre for ASEAN Studies



cimda

Centre for International Management
and Development Antwerp

**Hitting a stone with an egg?
Cambodia's rural economy and
land tenure in transition**

Frank Van Acker

CAS Discussion paper No 23

April 1999

Cambodia is an overwhelmingly rural society, where the agricultural sector outsizes the rest of the economy. Stressing growth through agricultural development would not only develop Cambodia's potential comparative advantage in the export of primary goods and provide possibilities for backward and forward economic linkages. More fundamentally, it would enable broad-based growth of the rural economy, declared as topmost priority by the Cambodian government. Inasmuch as the 1996-2000 5-year plan reflects the stated pro-'rural poor' bias, budgetary and Balance of Payments performance suggest another reality. Necessary social investments are crowded out by security concerns, while the revenue base is exceedingly narrow and regressive, and undercuts the ecological sustainability of long term agricultural development. Direct foreign investments in the agricultural sector are secondary compared to capital-intensive investments in the garments industry. Employment creation as a whole lags behind the very rapid increase of the active population, pushing down overall productivity of the agricultural sector as it is forced to absorb excess labour. Therefore productivity increases in agricultural sub-sectors will be crucial both from an economic and social perspective. In first instance to consolidate economic growth, given the very erratic contribution to GDP-growth. Just as essential, in the absence of alternative employment opportunities outside agriculture, are the interlinked aspects of agricultural productivity and access to and size of subsistence land. On the whole, the rural-urban gap is widening, while inequality is also on the rise within the rural areas. Land access, and with it access to livelihood, is fast becoming a problem for rural families. Although the legal framework - as a poor synthesis of three different historical legacies of land tenure regimes - gives only possession rights to agricultural land, all economic agents treat them as if they were ownership rights. Consequently, the activation of the land market gives rise to a host of ownership disputes and contributes significantly to intensifying problems of land access for farmers. One important factor is the decrease of the traditionally sanctioned range of access and income, since common property resources and the benefits derived from them are privatised de facto. All these elements combine into an institutional framework that only manages to regulate access to land against very elevated transaction and outcome costs, putting undue pressure on rice cultivation and further enhancing land transactions via distress sales. The already fragile rights to land use and consequent livelihood of vulnerable groups in the countryside are further weakened.

1. Introduction

In May '98, the Kingdom of Cambodia embraced the international headlines afresh in an accolade that reminded the world of one of the most traumatic recent histories on earth. The report of the sudden death of Pol Pot in a Khmer Rouge bootcamp somewhere on the Thai-Cambodian border churned up memories of a tragedy of genocide, perpetrated in the name of ideological and nationalist fanaticism. The superlatives applicable seem to be in sharp contrast with the size and economic insignificance of the country... An estimated 539,465 tons of high explosive dropped on Cambodia by American B-52's from '70 to '73 ¹(even though the war in Cambodia was commonly called a 'side-show' to the 'main theatre'), the death of about one in six Cambodians at the hands of Pol Pot's regime from '75 to '79,

¹ This is three times the quantity of bombs dropped by US forces on Japan in the whole of WWII. Moreover the bombing concentrated on 25% of Cambodian territory, and more than half of the bombs were dropped between February and August 1973, just before a Congressional ban on American bombing came into effect in August (Conway, 1991)

the scattering of about 350,000 Cambodians in refugee camps following the Vietnamese invasion and occupation...

Cambodia is still overcoming the long record of political conflict and the legacy of state-sponsored destruction of capital incl. people, as the Khmer Rouge targeted human capital for extermination. The ruin or damage of approximately 75% of its rural infrastructure, with over 6 million land mines estimated in the ground – at least one for every two Cambodians² - resulted in a multi-faceted vulnerability that is closely linked to the history of prolonged conflict and poverty. The country has not only the youngest population in the world. It accommodates a large number of displaced and relocated persons, one of the highest proportions of amputees, a deficit of post-primary-schooled persons for the age group 35-40, a high rate of female headship of households, a large proportion of dependants to working adults, and extremely poor health conditions (1997 Village and Commune Targeting Exercise: 6, Cambodian Human Development Report 1997).

Rather unsurprisingly given this background, despite experiments with various development models, the structure of the Cambodian economy has changed little since independence in 1953. Almost 85% of the population remains locked in quasi-subsistence agricultural activities, with little change in agricultural techniques since the Angkor empire, while the manufacturing sector lingers in its embryonic station. Only in the 1990's for example, were the rice output levels of the '60's restored (Annear, 1995:10).

Necessarily, a sound discussion of Cambodia's reality cannot but be framed in this contextual pattern of war and devastation during the seventies and eighties on the one hand, and the imperative of long term development of a poor agrarian economy on the other. From this vantagepoint, the transition that Cambodia began in '85 and formalised in '89 when the government moved towards establishing a mixed economy, is truly remarkable. On the economic side, since 1993 a program of structural adjustment is to underscore a process of long term economic reform designed to engineer the transition from a Russian-style command economy to a market economy. On the political side, an equally daunting metamorphosis - in its initial phase largely engineered by the UN - must allow Cambodia to change from a war-torn communist regime into a democratic state, lifting it from decades of war by a yet unfinished peace process. However, the weight of long term political and social constraints cannot simply be cast aside. The many dangers and pitfalls of such an intricate transition have been demonstrated once again by the economic turmoil affecting South East Asia, the Cambodian coup in July '97 and the contested elections of July '98. More than ever, within an environment of stiffer regional competition, *"Cambodia is now at the crossroads. It must make a transition towards sustainable development, as initial gains will soon be exhausted. In order to reduce poverty significantly and enhance economic and social well-being, Cambodia must sustain rapid and broad-based economic growth over the long term"*(World Bank, 1997:ii).

As the First Socio-economic Development Plan (1996-2000) points out, the prime focus of the Cambodian government's long term development strategy is the rural economy (Min. of Planning, 1995:3).

In an overwhelmingly agrarian society, access to land constitutes the principal access to livelihood and with it the right to subsistence. Governments mostly adhere to a 'teleological' perspective of modernisation in this regard. The idea is to create a modern sector by redefining property rights, essentially superimposing on the set of customary rules and arrangements a system of formalised rights specified by a national cadaster system. The prevailing effect however is to officialize a normative dualization, which does indeed enhance transferability, but carries with it the 'perverse' (contrary) effect of decreasing security of tenure, as pictured in figure 1.

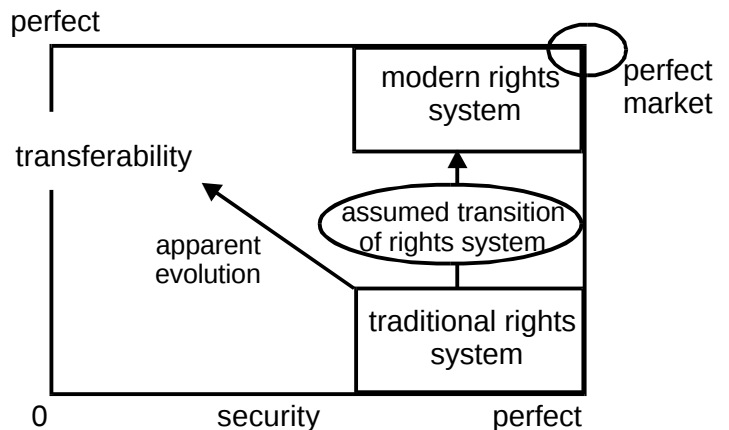


Figure 1: Land rights: teleological perspective of modernisation

The contest of rights over land by individuals drawing on different sets of legal rights which interact with each other, give rise to a host of contradictions and – more importantly – poverty for those who lose their land or their right to use its products. The case of Cambodia was no exception in this regard: *“the key step in the process of transition from a command to a market economy and in the reversal of economic decline was the restoration of private property rights in 1989”* (World Bank, 1996:2). The situation in Cambodia however, may undoubtedly appear even more complex than in other countries. All private property - and with it the use of money - was abolished under Poll Pot, and all property records were systematically destroyed. Following the Vietnamese invasion in '79, the subsequent vietnamized system of the 'Krom Samaki' retained the characteristic of collectivisation, albeit in a less forbidding format. Starting in '89, the government reintroduced the possibility of private property, according rights to claimants based on possession. Or should we rather say, according rights to the first to have repossessed a property in the general confusion after 1979.

The aim of this paper then is to give an overview of the particular situation in Cambodia with regards to land tenure and access to land, situating it within the overall economic framework of the country. The central argument is that – given Cambodia's economic parameters – growth must necessarily be based on broad-based rural development, to which the issue of access to land – hence livelihood – is pivotal. As Thion asserts, while advising the observer 'to wade into the mud of the rice-fields', the land question is not a simple political problem to be settled amongst others, as *“you cannot move a single piece without returning to the checkerboard”* (Thion, 1993:45). Before turning towards the agricultural sector in general and the issue of land tenure in particular, Cambodia's economic parameters need to be clarified. In so doing, it will be argued that Cambodia's comparative advantage in the agricultural sector has not been well developed.

² From January to May 1998, the CMAC (Cambodian Mine Action Center) cleared 637 ha of land of mines, esti-

2. Cambodia's economic parameters

2.1 The transition process

By selecting the path of export-led growth, to be achieved through the expansion of the private sector, Cambodia has opted to become the youngest cub in the pedigree of the so-called tiger economies of the ASEAN group³. The basic settings governing this option have been elaborated in the 'National Plan to Rehabilitate and Develop Cambodia' (NPRD)⁴. More recently, the new 5-year plan (1996-2000) consolidated the direction and set a yearly growth target of 7 to 8% (scaled down to 3% in 1998). Adhering to a trickle-down philosophy, the Royal Government of Cambodia asserts that "a growing economy is the final key to any long-run offensive on poverty and for human development", and that "attracting, promoting, and facilitating private investment for economic growth is the key objective"(Socio-Economic Development Status, 1996:11). To achieve this, macroeconomic stability has been considered the essential part of the transition process. As the IMF states, Cambodia – in the company of Vietnam and Laos – managed to achieve remarkable financial stability within a short period while sustaining output growth, and this in difficult environments of extensive parallel markets, high 'dollarization', and underdeveloped institutional frameworks (IMF, 1996). In view of the relatively few opportunities for the multiplier effect of government expenditures to play out, macro-economic developments have been impressive indeed. GDP expanded at an average annual rate of about 6% during 1991-95, inflation which averaged about 140% per annum in 1990-92 was reduced to 3.5% in 1995, and budgetary revenue as a share of GDP doubled during 1991-95 (World Bank, 1997).

Market forces increasingly determine resource allocation. As Kannan writes: "*In substance, all markets are now 'free' markets. The product market is governed by supply and demand; there are no major restrictions on factor market transactions such as land and capital. The labour market is completely free with no standards fixed on conditions of work and wages*" (Kannan, 1997:10). Yet, implicit in the strategy of rapid economic growth are some inconsistencies that must be resolved if the aim of alleviating poverty is to be achieved. The most important of these is the way economic growth must be managed to encourage social development, in order to cover the areas that the market alone will not encompass. Not a futile question given that, as in most ex-colonies, the structure of the Cambodian economy is essentially skewed. To cite from the 1959 doctoral thesis of Khieu Samphan (one of the later ideologues of the Khmer Rouge): "*such industrial growth as did occur from foreign investment acted to deepen the problem, as it mostly occurred in areas that simply facilitated the foreign trade economy. The investment provided few employment opportunities or avenues for local capital formation, and it promoted the economy's vertical disintegration*"(cited in Annear, 1995:5). In other words, the national market cannot cohere, except for mediation by the international market. Almost 40 years later these words retain most, if not all, their lustre. The quasi-subsistence agriculture fails to provide a significant surplus for industrialization, while the bulk of foreign investment and commercial activity has been in trade and not in manufacturing. Table 1.B shows how trade and tourism together in 1996 pro-

mating it would take 20 to 30 years to clear all (Cambodian Daily, 18/6/98)

³ Cambodia would formally have joined the ASEAN in 1998, had not the coup d'etat of 1997 and the subsequent political turmoil intervened.

⁴ The NPRD is the national consensus program re. the path of rehabilitation and development that was presented at the ICORC Tokyo meeting in 1994

vided an estimated 16.3% of GDP, employing 9.9% of the country's labour force. The comparative figures for manufacturing and rice culture for the same year are resp. a contribution of 7.9% and 13.6% to GDP, and employment of 3.4% and 72.3% of the labour force. From Table 1.A it is clear that agriculture has been forced to absorb a disproportionate share of the increase in the labour force, pushing down labour productivity in the agricultural sector.

Table 1.A: Labour productivity by sector, 1993-94 and 1996

	Real GDP/employed person (riels/person)		Index of labour productivity (1993-94 = 100)	
	1993-94	1996	1993-94	1996
Total economy	75,612	71,602	100	95
O/w agriculture	46,369	39,107	100	84
Industry	304,845	300,683	100	99
services	132,758	158,455	100	119

Source: Cambodia Development Review, September 1998

Table 1.B: Contribution to GDP and employment by sectors (in percent)

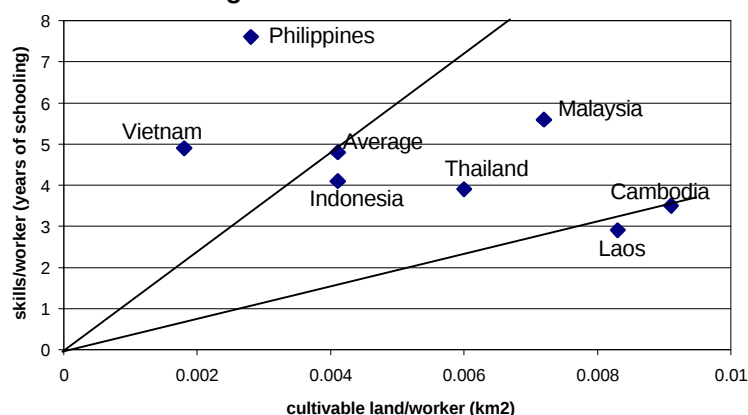
Sector	1995 /b	1996 /b	Employed (SESC) /a
Agriculture	44.6	42.7	75.1
Rice	14.7	13.6	72.3
Other Crops & Rubber	10.5	10.3	
Livestock	12.6	12.6	0.7
Fishery	3.7	3.5	1.4
Forestry	3.2	2.8	0.7
Industry	18.7	19.9	4.5
Mining & Quarrying	1.2	1.3	0.2
Manufacturing	7.4	7.9	3.4
Electricity and Water	0.2	0.3	0.1
Construction	9.8	10.4	0.8
Services	36.6	37.4	20.4
Transport & Communications	3.3	3.5	3.1
Wholesale & Retail Trade	14.9	15.7	9.7
Hotels, Restaurants & Tourism	0.6	0.6	0.2
Public Administration	3.9	3.7	3.7
Ownership of Dwelling	6.7	6.6	-
Other Services	7.3	7.3	3.6
Total Gross Domestic Product	100	100	

Source: Based on a) Socio-Economic Development Status, May 1996, b) World Bank, June 1997

In cross-section studies of growth, one of the most robust results is the importance of investments, esp. in infrastructure and equipment. Because of its sheer size, the Cambodian rural economy is pivotal in the process of making the national market cohere, not only to create forwards linkages towards agro-processing and industrialization, but in the much broader sense of a labour and savings pool for industrial development, and markets for industrial output. Considering that trade, tourism, and construction have driven much of the recent remarkable growth, most of the investments – in quick-yielding and mobile assets – have poured into services concentrated in urban areas, esp. in Phnom Penh (World Bank, 1996:17)⁵. The issue here is not so much limited to exacerbating the urban-rural gap, but may be much more fundamental in failing to combine policy and the relative abundance of factor endowments. As Kato et al. argue, Cambodia has a potential comparative advantage in agricultural products which – from a regional (ASEAN) perspective – is neither revealed nor developed

(1998:8). Assuming that the skills-land ratio is a critical factor in determining potential comparative advantage of countries⁶, figure 2 illustrates that Cambodia (with Laos) has a potential comparative advantage in exports of primary goods⁷. In contrast, the index of revealed comparative advantage for exports (RCAX) – constructed from trade data – indicates Cambodia's actual trade advantage to be revealed primarily in natural resource-based products (rubber, wood) and labour-intensive light manufacturing (garments).

Figure 2: Determinants of comparative advantage: average skills-land ratio



Source: Kato et.al, 1998:7

As will be seen in section III, the supply response of the agricultural sector has been deficient. To match policy with factor endowments in the framework expressed by the government (rural development and private investments), both the budget and the balance of payments would need to reflect a concern with agricultural sector development, in the form respectively of budget support and foreign investments (in the absence of sufficient domestic capital formation). Yet a closer look reveals that neither Cambodia's current budgetary condition, nor the situation of its balance of payments, are sustainable in the medium term.

2.2 Public resources for rural development

The principal challenge for the government is to mobilise limited public resources to leverage human capacity development and an improved performance of the agricultural sector. Yet, to put it succinctly, defence and security outlays are crowding out social investments on the expenditure side. On the revenue side regressive import-taxes and non-tax income from logging account for the bulk of earnings. Not only is income inequality exacerbated, but unsustainable logging is putting severe pressures on the natural resource base and therefore on long term agricultural development, while it provides barely a tenth of its potential value.

Just as in other transition countries, where a 'dollarized' economy prevents the instrumental use of a monetary policy on the one hand, and with a weak and fragile revenue base on the other, the burden of stabilisation rested primarily on fiscal adjustments to achieve expenditure compression. Govern-

⁵ The UNTAC intervention in Cambodia – in itself a class-room example of how massive foreign intervention contributes to major sectoral price increases – contributed strongly to the skewed growth whereby the urban-based service sector flourishes

⁶ Based on the argument of Wood (1994) to extend the Heckser-Ohlin theory of international trade to include skills or human resources as a determinant of comparative advantage, on the strength of his empirical evidence that the proportion of manufacturing exports relative to primary exports is positively correlated with skills-land ratio

⁷ A steeper slope signifies relatively more skills-abundant factor endowments and hence a more pronounced comparative advantage in manufacturing exports relative to primary

ment revenues initially declined as the country moved toward a modern tax system instead of relying on transfers from state enterprises (IMF, 1996). Cambodia's budget revenue-to-GDP ratio, 9.1% in 1996, compares unfavourably not only with its Indochina neighbours (cf. Table 2), but is only half of the 12 to 13% average for all low-income countries. Moreover, the tax system is narrowly based, with a heavy reliance on import taxes rather than taxes on income and expenditure. Import duties represent about 70% of total tax revenue, of which about one-third comes

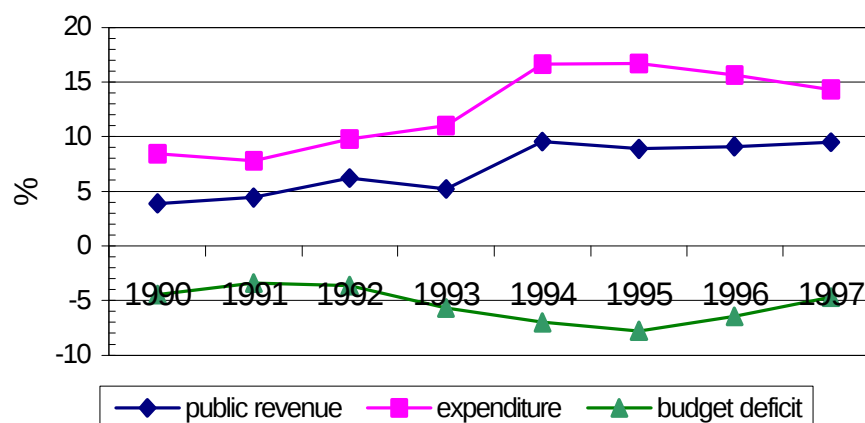
Table 2: Comparison of Revenue Efforts (in percent of GDP)

Country	year	Tax Revenue	Non-tax Revenue	Total Revenue
Cambodia	1996	7.1	2.7	9.8
Lao PDR	1995/96	10.8	2.5	13.3
Vietnam	1996	19.6	3.4	23.0
Ethiopia	1995/96	12.2	5.4	17.6
Uganda	1995/96	9.7	0.6	10.3

Source: World Bank estimates, 1997:12

from the taxation of re-exports to neighbouring countries, mainly – and rather surprisingly - gold (World Bank, 1996:9). In addition, in 1995-96 62% of all revenues from imports (and hence about 45% of all tax revenue) were derived from just three goods: petroleum, cigarettes, and beer (Robertson & Pohoresky, 1998:60). Non-tax revenues have been limited to 2-3% of GDP owing largely to failure to collect full economic values for forestry revenues: royalties account for about one-fifth of their economic value, and only a part of the revenues from logging activities have been transferred to the national budget (World Bank, 1997:17). E.g. in 1996, the government collected just \$ 10.7m, although

Figure 3: Public revenue, expenditure, overall budget deficit (% share of GDP)



estimates are that it could earn as much as \$ 100 m from a sustainable logging policy, equivalent to over one-third of budget revenue or over 3% of GDP in 1996 (EIU Country Report, 1998:21; World Bank, 1997:iii).

Source: based on Sophal et.al, 1998:table 1.3

In its part to contain overall budgetary expenditures, and with capital expenditures secured almost exclusively through external financing⁸, the government concentrated on reducing current expenditures. No 'peace dividend' for Cambodia however. Through a redeployment of the budget away from civilian non-wage expenditures towards defence and security expenditures, essential outlays for priority social sectors were crowded out. After the July 1997 events, additional austerity measures severely

⁸ For some ministries such as Agriculture and Rural Development, capital expenditure budgets for 1997 exceed current budgets by a factor of 4:1. Combined with the lack of funds for salaries and non-wage expenses, a satisfactory accomplishment of development projects for which funding is committed seems difficult.

affected expenditures on health, education, and agricultural development⁹. Table 3 shows how the combined government expenditures for health, education, and agricultural and rural development never exceeded 20% of total expenditures since the NPRD was put in action (1994), while actual security expenditures have never dipped below 50% during the same period.

Table 3: Current Expenditure by Sector (% of GDP)

	1994 /a		1995 /a		1996 /a		1997 /b
	budget	outcome	budget	outcome	budget	outcome	outcome
Defense and Security	48.4	59.1	45.8	57.6	52.2	50.5	53.9
Education	10.9	9.2	11.3	9.9	11.2	10.1	9.9
Health	7.2	4.5	5.5	3.6	8.0	5.5	5.7
Agriculture & Rural Devel.	2.5	1.9	2.6	2.1	2.8	2.4	2.2

Source: a/World Bank, 1997:20; b/ Sophal et al., 1998:11

In a regional perspective, Cambodia – at 4.9% of GDP in 1995 - has higher defence expenditures than all ASEAN countries (e.g. Indonesia: 1.0% of GDP in 1993, Thailand: 2.4% of GDP in 1994). Given that the army is now estimated at a strength of 127,000 and growing as Khmer Rouge battalions are integrated into the Royal Armed Forces, downsizing it seems like the obvious solution to free limited public resources for rural development. The main constraint however is the creation of sustainable employment in the rural economy. One could wonder here if the tiger cub is not fated to chase its own tail, noting that rural development hinges on squeezing back the cost of the army, which hinges on rural development. As the World Bank notes, demobilisation depends largely on the Government's ability to “*ensure property rights and access to arable land in the rural areas for those soldiers who choose to return to the rural economy*”(World Bank, 1997:27)¹⁰. Employment creation in the agricultural sector is key to effective demobilisation, since the employment created in the service sector and the garments industry is essentially geared towards women (as even the most cursory observation at the gates of the numerous garment factories outside the capital Phnom Penh would reveal). The key to broad-based growth – even from a budgetary perspective - is therefore not simply dependent on fiscal reform or a more sustainable logging policy, but calls in the issues of access to land and rural employment creation as central.

Whether the outlook for public investments and social services will look any better in the near future is rather doubtful. For one, the July 1997 coup and the contested elections of July 1998 did not make matters easier for Cambodia. The government is reliant on international aid and loans to fund the budget deficit. Major donors suspended aid after the coup, and most have only recently resumed aid – if at all - resulting in a severe financing shortage. In addition, the Asia crisis has dramatically altered

⁹ The situation for 1998 is not be much better. Health and other social sectors have received just over half of the allocated budget, while the military far surpassed its budget: in the first 10 months of the year, defence spent 136% of what it was allocated as operational costs for the year (Cambodia Daily, 15/12/98:10). Even for 1999, the outlook remains for bloated security spending; in the new budget announced, about 30% would go to defence (Financial Times, 1/1/99)

¹⁰ There is quite a bit of overlap between the problems of insufficient non-tax revenue and uneven spending due to a bloated army. Reports from 'Global Witness' habitually point out the very widespread illegal logging by the military; a report on the illegal logging in Bokor National Park, with 'World Heritage Status', documents how military division 44 operates at least five sawmill villages in the park (Global Witness, 6/2/98). The non-transparent way of operating of the RCAF is clear from other sources as well. The World Bank reports for 1994 that the army borrowed US\$30 m, although the government committed itself under the IMF's ESAF program to restrict its non-concessional borrowing to \$10 m for that year.

the economic environment surrounding Cambodia. This may not only affect Cambodia's prospects to access aid flows, but will affect the competitiveness of Cambodia's goods and services in regional and world markets, following the regional realignment of exchange rates. The ASEAN countries account for 74.3% as sources of Cambodia's imports and for 66.5% as destinations of its exports (Kato, 1998). In this light, the crisis has been transmitted to Cambodia not only via the channel of price effects (esp. in view of the fact that Cambodia's economy remains heavily 'dollarized'), but also via income effects as economic growth of the main trading partners dipped towards (or below) zero.¹¹

At this juncture, it may be interesting to take a look at Cambodia's Balance of Payments performance, and find out to what extent the government policy of attracting foreign investment to supplement domestic investment has been steered towards fulfilling the country's potential comparative advantage in agriculture.

2.3 Trade flows and Foreign Direct Investment in agriculture

Cambodia's balance of payments performance needs to be interpreted with caution, because of the importance of re-exports (owing to the differences in tariff rates between Cambodia and neighbouring countries) and the illegal export of logs, sawn timber and rubber. With export growth the key to an acceleration of output growth, it is good news that exports increased four-fold since 1991. Yet, the country's export base remains very small, and re-exports keep on exceeding domestic exports (respectively US\$361million and \$289million in 1996)¹². Domestic exports continue to be dominated by timber; even after the export-ban on roundwood logs, which came into effect on 31/12/95, logs and sawn timber constitute 50% of recorded domestic export earnings in 1996. Although a major contributor to the growth of the primary sector, the export of timber is increasingly becoming an act of 'capital consumption' (Kannan, 1997). Other registered agricultural exports include corn, soybeans, sesame, and pepper, while rice is also known to cross the border, particularly into Vietnam and food-deficit areas in northeastern Thailand (World Bank, 1994)¹³. Manufacturing exports have not yet appeared as overly significant, as *"cheap labour does not give the country a particular competitive advantage both because wage costs are already higher than in neighbouring countries like China and the labour force in general is lacking in education and does not possess necessary skills"* (Annear, 1995:22). Nevertheless, the development of the garments industry has started and picked up momentum as Cambodia gained 'most favoured nation' status from the US.

Just as with the budget, a fundamental disequilibrium is apparent with the balance of payments. Without doubt, Cambodia is the most aid-dependent country in the sub-region; the aid Cambodia received in 1995 amounted to 20.5% of GNP, compared to 4.1% for Vietnam (Kato, 1998:13). The increase in

¹¹ Dollarisation may be exacerbating unequal income distribution in Cambodia: those who earn incomes in dollar and Riel tend to belong to the middle- and high income groups and the low income group respectively. The depreciation of the Cambodian Riel against the US dollar affects the purchasing power of these two groups in opposite directions.

¹² In 1992, Cambodia exported only 19 products at the three-digit SITC level, where the total number of products is 239 (compared to e.g. 133 products for Vietnam and 211 products for Thailand) (Kato, 1998:74)

¹³ Due to food shortages, rice exports were illegal until 1995. Recently, the high demand from Thai traders pushed up prices for Battambang rice by 18% in 1998, while a similar high demand from Vietnam raised prices in the eastern provinces by 30% in less than a month (Sopha et al., 1998:27)

external capital inflows, esp. in the form of grants and non-repayable external assistance, helped offset a widening of the current account deficit from 1.5% of GDP in 1991 to 14.9% in 1995. With recorded timber exports expected to fall because of the log-export ban, and with re-export anticipated to drop steadily as import liberalisation in neighbouring countries proceeds, the outlook is for the current account deficit to widen further. For example, whereas in the first semester 1997 about 65,000 m³ of wood related exports was registered, this dropped to ca. 10,000 m³ in the first semester of 1998, with companies forced to cut prices by up to 50% in the first half of 1998 compared with a year earlier (Cambodia Development Review, 1998). Wholly in the line of deepening structural reforms to improve the climate for private sector development, foreign direct investment (FDI) inflows are expected to meet an increasing proportion of Cambodia's external financing requirements. As Table 4 makes clear, projections are for official grants to be maintained at 1995 levels, and for the inflow of concessional loans and FDI to double between 1995 and 2000.

Table 4: External Financing Requirements

	1995	1996	1997	1998	1999	2000
Financing needs (in millions of US \$)						
Current Account Deficits	434	485	509	517	529	510
Reserve Accumulation of NBC	74	38	32	15	12	33
M&L Debt Amortisation	12	19	12	13	11	8
Total	520	543	553	545	552	551
Financing Resources						
Official Grants	270	270	270	250	250	250
M&L Borrowing	63	111	122	141	138	126
Foreign Direct Investments	100	120	140	160	180	200
IMF (net)	42	42	21	-6	-17	-25
Other	45	0	0	0	0	0
Total	520	543	553	545	552	551

Source: World Bank, 1996

However as stated earlier, not only did the 1997 coup badly shake investor confidence, the dollarization of the Cambodian economy has kept investment costs high for Asian investors whose currencies have fallen sharply against the dollar. Consequently, according to the Cambodia Investment Board (CIB) data, total registered capital and fixed assets of investment declined by around 10% and 5% res. in 1997, relative to their levels in 1996. The decline of approved investment was particularly significant in the agricultural and service sectors during this period (ibid:12). The decline in the agricultural sector is rather critical, in view of its relatively low share of investment projects approved by the CIB over the period August 1994 – March 1998, as can be seen in annex 3. The sector absorbed 11% of total registered capital, 6% of total fixed assets, and accounted for 8% of total employment created (Kato et al., 1998). In contrast, the garments industry over the same period accounted for 8% of registered capital, 5% of fixed assets, and 53% of employment created. Hence, what these figures suggest, is that the agricultural sector captures relatively little of overall FDI flows into Cambodia, which doesn't help to offset the essentially skewed nature of the country's economic structure. In addition, the investment attracted into the agricultural sector is relatively capital-intensive and hence supports extensive rather than intensive forms of agriculture. The ratio of fixed assets per employment created during the above stated period is US \$ 9,825/employment in agriculture, as against US \$ 1,468/employment in the garments industry (calculations based on figures of annex 3). One of the reasons may again be found in

the logging policies of the government, as low royalties not only put unsustainable pressure on the forest resource base, but also contribute to overcapitalization (Min. of Environment, 1998:7). This runs counter to the absolute necessity of sustainable rural employment creation, as an integral part of broad-based development. It would allow achieving higher levels of agricultural productivity, absorbing excess labour in full- rather than under-employment, thereby enhancing the possibility to effectively demobilise soldiers and free public resources for social investments, and raise the overall level of income in the countryside.

Adverse changes may affect the capital account as well, thereby putting future restrictions on the capacity of the government to mobilise public resources for human capacity building and rural development. Cambodia is currently considered a "Severely Indebted Low Income Country". Following a re-scheduling of Cambodia's Paris Club debt in January 1995, the main debt indicators have improved. The Debt/Exports and Debt/GNP ratios (%) fell in the period 1991-1995 res. from 834.6 to 225.2, and from 99.7 to 71.3 (World Bank, 1997:55). However, little progress has been made in finding a solution for outstanding debt in non-convertible currencies, notably the debt of 814 million rubles owed to Russia that, if valued at the 1991 exchange rate used by the Russian Federation, would amount to US\$1.4billion (44% of GDP in 1996). Moreover, a recent report suggested that a number of official creditors would be pursuing repayment of debts incurred during the 1960s and 1970s! *Primus inter pares*, the US government is seeking repayment of \$450m borrowed by the Lon Nol regime in the 1970-75 period (EIU, 1998:23).

To summarise, the general call is for broad-based growth that promotes rural development. Yet, adjustment programmes redistribute the timing and extent of costs and benefits of reforms among economic actors. As such, *"there is the possibility of the ideology of the market – which the SAP represents in a concentrated and operational form – overshadowing the reconstruction and development programme in general and the overall economic reform in particular"* (Kannan, 1997:21). The impressive growth performance of the last years largely reflected a recovery from the past, and has been dependent on a very narrow base (urban and service-oriented). The pattern of government expenditure is crucially dependent on external assistance and highly distorted, in that it favours defence expenditures rather than rural development and human capacity building (education, health...). The extent of the current deficit of the balance of payments depends acutely on the export of unprocessed natural resource products, which may constitute a drawback for Cambodia's long term economic growth. As Killick states: *"Engel's Law, and a similar tendency for non-food primary products to display small – and probably declining – income elasticities of world demand is a grave problem for small low-income countries"* (1993:19)¹⁴. The amortisation of a very extensive debt stock combined with a regional economic downturn – hence the inflow of FDI - diminishes further the potential for social investments. The need for such investments or for well-directed FDI however, is not in doubt. Cambodia remains one of the poorest countries in Asia, with social indicators comparing unfavourably with other low-income countries. Population growth rate (3% a year) is much higher than the average of 1.7%, the infant mortality rate at 110 per thousand is twice as high, life expectancy at 52 years is 10 years lower, and primary enrolment rate is 50 points lower (World Bank, 1997). In addition, the poor in Cam-

bodia are very vulnerable, assuming vulnerability to be a function of factors such as being disabled, displaced, aged, very young, widowed, all conditions well fulfilled in Cambodia. Measures to protect the vulnerable need to be integral to the development thrust, rather than being added on as supplementaries. Policy can be brought to play at all levels: increasing the access to productive assets, increasing the returns from the assets they do possess etc. The question arises whether this endemic poverty will be targeted and mitigated in the development process, or whether planners will merely rely on the trickle-down effects of economic growth to meet the penury of the poor. The latter in the knowledge that *“liberalisation creates new income opportunities that the rich are better able to exploit, thanks to their better physical and human capital base”* (UNDP, 1997:v). The next section will look more closely at the specific poverty profile of Cambodia.

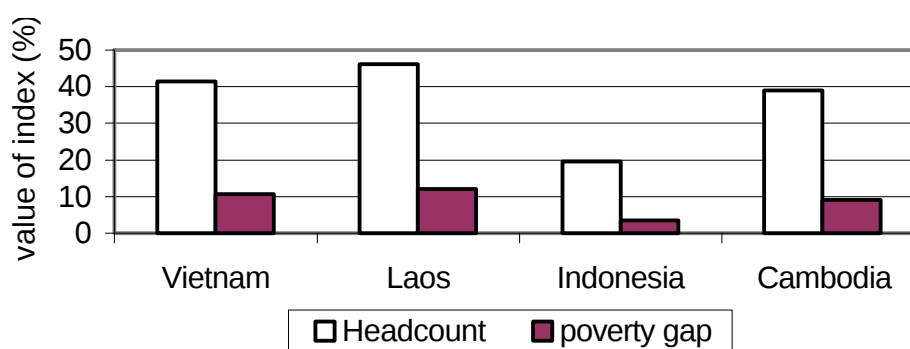
3. Poverty in Cambodia

3.1 The Human Development Index

Table 5 gives an overview of the levels of GDP per capita in the Mekong River Basin where – apart perhaps for the Chinese province of Yunnan - climatic conditions are quite similar. Likewise, apart from Thailand and Yunnan, the countries present similar situations in that the bulk of the population is based in the countryside. The figures are offset against the relative importance of agriculture in the economies of the different countries. Although these figures should do no more than serve as a rough approximation, they do indicate that patterns of poverty are similar in the majority of countries: rural-based and related to the wide spread of subsistence agriculture. Figure 4 fleshes this out by situating Cambodia relative to Laos and Vietnam in terms of poverty incidence, showing the depth and severity of poverty in the three countries to be very comparable¹⁵. However, as will be developed more fully

later, table 5 also indicates pronounced differences in agricultural productivity, given marked differences in agricultural output per capita, whereas agricultural sector employment differs rather marginally.

Figure 4: Poverty rates in selected Asian countries



Source: based on Sophal et.al, 1998:table 3.7

¹⁴ During the twentieth century, real non-oil commodity prices taken together, have declined at a trend rate of 0.6% per annum (Killick, 1993:31)

¹⁵ Although poverty, as measured by any indicator, seems to be much worse in the three Indochina countries than in Indonesia, this almost certainly would no longer be true in the midst of Indonesia's severest recession ever. In that sense, the figures have to be interpreted with caution even for the three Indochinese countries, as data pre-date the 'currency crunch'.

Table 5: Indicators of Mekong River Riparian Countries (In US\$ unless otherwise specified)

	Burma	Cambodia	Lao PDR	Thailand	Vietnam	Yunnan
GDP (billion US\$)	11.00	2.03	1.46	140.30	17.40	4.51
GDP per capita	250.00	206.00	335.00	2377.00	240.00	465.00
GDP- Agric.(%)	47.10	44.80	57.40	11.10	32.30	21.00
Agr. GDP/cap♦	117.75	92.29	192.29	263.85	77.52	97.65
Agr. Labour Force (%)▲	73.00	74.00	78.00	64.00	71.00	-

Source: Hirsch, 1997; ♦own calculation; ▲UNDP Human Development Report 1996

The UNDP lists Cambodia as 156th on the human development rank, with a score of 0.325 putting it just beneath Uganda at the top of the world's 20 least developed nations (UNDP, 1996:137). The Cambodian Human Development Report (UNDP, 1997) reports a revised estimate of 0.427 as value for the human development index (HDI) for Cambodia. This score puts Cambodia's rank at 140 out of a total of 175 countries for which HDIs are reported – just below India and Pakistan. Whereas Cambodia's score is very low in absolute terms, regression analysis nevertheless shows that Cambodia has an HDI score that is consistent with its level of per capita GDP. In other words, it does not have a lower HDI score than would be expected at its level of per capita GNP, contrary to e.g. Laos that has a higher GDP/capita but a similar HDI score (Cambodia Human Development Report, 1997). Such a finding gives the impression of Cambodia as a poor, but more egalitarian society, in the sense of a more even spread of social and human outcomes across the population. A look at the depth and severity of poverty compounds this perception; whereas Cambodia in absolute terms (GDP/capita) may be the poorest of the three Indo-chinese countries, the depth and severity of poverty are (marginally) higher in Laos and Vietnam (UNDP, 1997:15).

Could it be usefully concluded from these comparisons that Cambodia's version of economic growth promotes broad-based rural development, and hence renders the interpersonal distribution of income in Cambodia more equal? This would be a rather surprising fact, given the large provincial variations and the large differences in social outcomes across economic groups. In general, *"the poorest 20% of the population has the worst possible indicators"*, while *"malnutrition, poor health, and illiteracy are concentrated in certain provinces"* (UNDP, 1997:65).

Before considering the nature and distribution of income in Cambodia, it is practical to reflect in some more detail on the country's employment profile. It appears that the wide spread of subsistence agriculture and the scarcity of non-agricultural employment opportunities are the main structural elements of poverty in Cambodia (Annear, 1995:51). When considering the relative contribution to the total poverty headcount rates, there is indeed a large overlap between the figures per sector and per category of employer of the head of household. Agriculture accounts for 71% of the country's poor, whereas the self-employed account for 74% of total poverty (Poverty Profile, 1997:20-22). Earlier, when looking at the pattern of employment creation, it was clear that very few jobs were created in the countryside by inward FDI flows – the government's anointed pump-priming mechanism to boost investments. At the same time budgetary scope for employment creation through public works programmes (roads, irrigation canals...) remains extremely limited. Consequently, the rapidly increasing active population continues to be mainly absorbed in the subsistence agricultural sector, pushing down agricultural produc-

tivity overall. The following part will take a closer look at the other factor of the poverty equation in Cambodia, the wide spread of subsistence agriculture, and relate it to subsistence land size.

3.2 Rural poverty and the subsistence land size

The Socio-economic Survey of Cambodia of 1993/94 found that 5.1 million of Cambodia's estimated total population of 9 million at that time was in the age group from 15 to 64 years, the conventional definition of the potential labour force. Discounting factors such as disabilities and the fact that 45% of the population was younger than 15 in 1995, the total labour force was estimated at 4.5 million. This gives Cambodia a much higher dependency ratio (non-working population supported by the labour force) than is the case in other countries (World Bank, 1996:19). About three-quarters of the active labour force for Cambodia as a whole is in agriculture¹⁶. A sectoral distribution of employment reveals that 82.5% of the rural sector depends on agriculture for employment (Prins, 1996:14). Yet, as table 6 on the percentage source of monthly income demonstrates, rural households are compelled to rely on multiple sources of income for a living.

Table 6: Distribution of average monthly household income by stratum and source of income (1993/94)

Source of income	Percent of total income			
	Cambodia (Extrap.)	Phnom Penh	Other Urban	Rural
Monetary income	67.4	63.2	61.4	69.5
Wages and salaries	9.2	14.2	13.7	6.6
Non-agricultural	36.8	40.2	38.9	33.6
Agricultural activities	18.1	1.2	5.8	27.2
Other cash receipts	3.2	7.3	2.9	2.0
Other	0.1	0.2	0.1	0.1
Non-Monetary income:	32.6	36.8	38.7	30.5
Agricultural products	11.4	0.6	5.2	16.3
Net rental value of owner occupied house	12.7	26.5	23.5	6.4
Non-agricultural	7.7	9.0	9.3	7.2
Income in kind	0.7	0.8	0.7	0.7
Total	100	100	100	100

Source: Ministry of Planning; Socio-Economic Survey of Cambodia 1993/94

Table 6 indicates that, in the rural areas, non-agricultural activities provide much more income (particularly cash income) than does farming. In essence, these figures translate a very basic fact about peasant societies in general and Cambodian rural life in particular. In a peasant society, households depend upon a range of occupations for their existence. In Cambodia, with some regional variation based on local conditions, subsistence is organised on the basis of a tree-way approach. Rice cultivation provides the staple food and the bulk of calories, while fishing supports protein intake in fresh or processed form (fish and shrimp paste)¹⁷. A recent study estimated per capita intake of fresh fish for non-fishing households at 39.9 kg/year (about 110 gr/day), going up to 123 kg for fishing families living near waterbodies (Ahmed et al., 1998:6). In addition, access to and harvesting of common property resources – inundated forests, flooded rice-fields, and riverbanks – acts as a buffer to the supply of

¹⁶ The civil service and military employ approximately 300,000 people, or more than 7% of the labour force

food and income whenever crop production fails. It also provides other basic necessities (e.g. fuel-wood, construction materials), adding the possibility to secure extra income on top of the cash earned by selling surplus rice or fish. Examples of activities that provide cash income that derive at least partly from common property resources are harvesting lotus flowers, catching 'wildlife' (frogs, snails, turtles, snakes, fowl...), duck rearing, livestock grazing, making charcoal, and vegetable gardening¹⁸.

Yet, as we shall see further on, the real unfolding drama is contained in the increasing pressure on fishing and common property resources. The excessive weight on the limited capacities for rice production weighs heavily in the form of insufficient subsistence land size. This trend is discernible from data concerning food security. Even when the poverty line is reduced to the level that would merely provide 2,100 calories/person/day and nothing else, the incidence of poverty is about 21%, indicating that one-fifth of the population is food-poor, or unable to meet even basic calorie requirements (UNDP, 1997:9). For the rural areas, the figure is 22% vs. 6% for Phnom Penh and 20% for other urban areas. To understand how the rural areas can be the most food-insecure, the subsistence land size is key. A 'farming systems research' in two villages in the province of Pursat departed from the FAO estimate of a per head yearly requirement of rice of 162 kg¹⁹. Considering farmed as well as uncleared land already under farmers possession, as well as the productivity of rice cultivation, 53% of the farmers of the surveyed area of Pursat village and 11.09% of that of Krakor village has land equal or bigger than the subsistence level (Shams et al, 1993:12). In essence therefore, res. 47% and 88% of farm holdings in these villages are very marginal, and farmers can only manage through supplementary income and activities.

Table 7: Annual self-sufficiency status in rice by size of agricultural land, 1995-96

Size of agricultural land	Surplus to sell	Just adequate	Good for 7-10 mos	Good for 3-6 mos	Good for < 3 mos	No self-sufficiency	Total
<i>Landless</i>							
Subtotal	10.0	16.0	30.0	31.0	18.0	1105.0	1210.0
%	2.2	2.3	2.9	4.7	4.2	65.4	24.4
<i>0 < land < 0.5 ha</i>							
Subtotal	12.0	95.0	409.0	217.0	205.0	328.0	1266.0
%	2.6	14.0	39.2	33.0	48.0	19.4	25.5
<i>0.5 < land < 1 ha</i>							
Subtotal	118.0	314.0	404.0	299.0	167.0	195.0	1497.0
%	25.5	46.1	38.7	45.4	39.1	11.5	30.2
<i>Land > 1 ha</i>							
Subtotal	322.0	256.0	201.0	111.0	37.0	62.0	991.0
%	69.7	37.6	19.3	16.9	8.7	3.7	20.0
<i>Grand total</i>	462.0	681.0	1044.0	658.0	427.0	1690.0	4962.0
%	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Ahmed et al., 1998:45

These findings at micro-level are reflected at the macro-level, given that almost 70% of rural households do not produce enough rice to provide them with half their caloric requirements (World Bank, 1996:34). The findings of a poverty mapping exercise undertaken by the World Food Program in 1993

¹⁷ In 1995, Cambodia held the largest amount of freshwater resources in cubic metres per capita in the region, except for Laos (Kato et al.:1998). However, a lot of fish for household consumption is gathered in such common property resources as inundated forests, wetlands, and flooded ricefields

¹⁸ In addition, income is derived from selling (or exchanging) one's own labour for draft power and transplanting, harvesting, and threshing of rice during peak seasons, and from a substantial cottage industry in the form of processing sugar palm to produce jaggery.

in 73 rice-growing districts across Cambodia are striking, as 54% of families were found to have less than 1 hectare of land (World Food Program, 1994). To relate these figures on subsistence land size to poverty, it is clear that the poorest households are the ones experiencing the most acute land pressure. A recent study, covering 5117 sample households (fishing and non-fishing) in 83 communes in 8 provinces, gave some data on annual self-sufficiency status in rice by size of agricultural land (cf. table 7).

Of the category of households entirely dependent on buying rice, 65.4% was landless. Of the households reporting a surplus, 69.7% had more than 1 ha. The poorest households are the ones most under pressure. In general rural households purchased or borrowed an average of 647.84 kg rice/household annually for the period 1995-96, with 1995 being considered a year of bumper crops (Ahmed et al., 1998:47)²⁰. Whereas the poorest (1st decile) in the rural areas spend on average 36.6% of their monthly income on cereals (rice), the equivalent figure for the 10th decile is 14.2% (NIS, 1997:table A-20). The relative food-insecurity of the rural areas is reflected once again in the comparative figures for the capital Phnom Penh, with a monthly average of 16.9% and 2.4% respectively for the 1st and 10th decile. Another echo can be found in the prevalence of stunting from longer-term chronic under-nutrition, with the poor in the rural areas typically showing the highest rates of malnutrition (UNDP, 1997:24). For instance, among the poorest 20% of the rural population, the prevalence of moderate stunting is as high as 61%, and that of moderate underweight is 54.4%. The relative proportion of food-expenditures per decile brings us back to the question of the trickle-down effect of economic growth on the income distribution.

3.3 Income distribution

The poverty gap index measures the shortfall between the expenditures of poor households and the poverty line. The data from the Socio-Economic Survey of Cambodia (1993-94) indicate that, although the total proportion of the Cambodian population in poverty is large (39% of the total), the poverty gap at 9.2% is relatively small. To turn back to the main question, if economic growth is to be the primary front on which the fight against poverty ought to be waged, how has sustained growth (at 6%) between 1994 and 1997 affected the income distribution? In order to estimate the interpersonal distribution of income, per capita consumption expenditure can be used as a proxy. This is not only necessitated by data requirements, but also by "the widely accepted notion" that - between current consumption and current income - the former is a less variable and more reliable indicator of 'permanent' income (UNDP, 1997:25). The Lorenz curves for consumption expenditure for 1993-94 and 1996 (Figure 5) shows that the poorest 20% of the population appears to have lost ground, with their relative share in national consumption falling about 17%. However, as Table 7 indicates, the urban areas saw a decline in inequality, whereas in the rural areas inequality increased sharply, with the poorest 80% falling back and the richer 20% progressing markedly.

¹⁹ This estimation is based on the assumption that rice is the source of 75% caloric requirements

²⁰ This is equivalent to the annual consumption of 4 persons. Given that the average size of Cambodian households is 5.2 persons (census, 1998), this would signify a failure to guarantee self-sufficiency for 77% of the household.

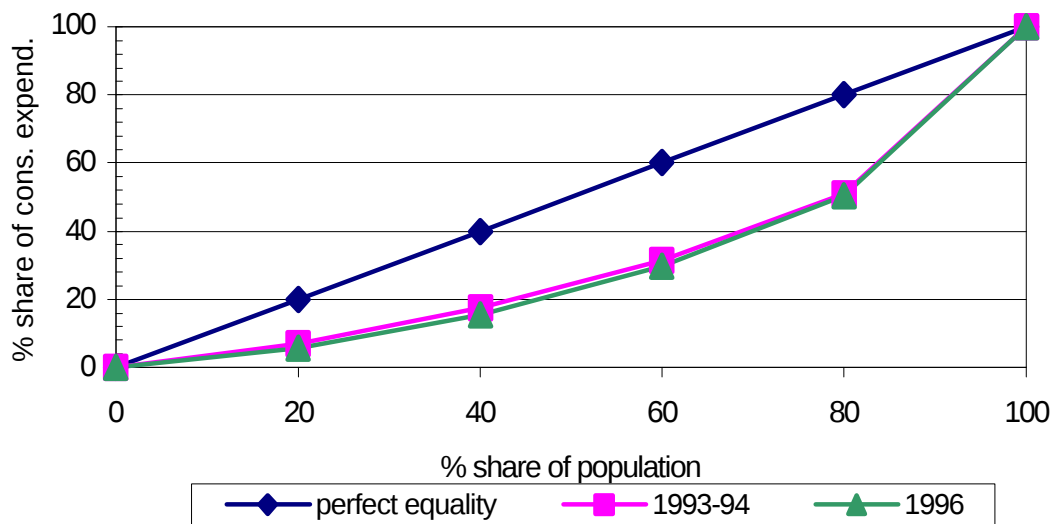
Table 8: Shares of expenditure quintiles in national, rural and urban consumption expenditure, 1993-94 and 1996

Total Exp. quintile	Rural		Urban		Total	
	1993/94	1996	1993/94	1996	1993/94	1996
Bottom	8.94	6.21	4.60	5.32	6.97	5.76
Second	13.27	10.49	8.27	9.77	10.55	9.91
Third	17.18	14.62	12.91	14.03	14.03	14.10
Fourth	22.44	21.06	20.75	20.64	19.43	20.65
Top	38.17	47.61	53.46	50.24	49.01	49.58

Source: Cambodia Human Development report, 1997

Judging from these findings, economic growth is not initiating a phase of broad-based rural development, and the benefits of Cambodia's recent development have accrued to the rich disproportionately. One possible explanation is Cambodia's low rate of taxation in relation to GDP, and more especially the unassuming role of progressive income and property taxes (Ministry of Planning, 1997:16).

Figure 5: Lorenz curve for consumption expenditures, 1993-94 and 1996



Source: based on total columns of table 8

As to how in particular economic growth deepened the rural-urban gap, Kannan might provide a clue. "One of the first casualties of the market-based reform process was the dismantling of the social protection afforded to these (vulnerable) sections of the population through a share in the local production of food, subsidised agricultural inputs, etc." (1997:25). Equity, beyond its strict economic sense, should be understood as an element of social organization. Undoubtedly, the most vulnerable received a measure of collective support under the vietnamized '*Krom Samaki*' system of agricultural production, that allowed the poorest households to cope with a lack of draught animals or implements (or male labour in the case of female-headed households). Although the 'peasants were masters in production and in distribution as well' under the '*Krom Samaki*' system, government directives nevertheless stipulated criteria for the distribution of produce within the group to the main and secondary workers, and to dependents and others unable to work (Ratner, 1995:11). In addition, as evidence for China and Vietnam points out how collectives really worked, local leaders charged with implementing policies found they needed to bargain with villagers and accommodate at least some of their concerns in

order to get a modicum of compliance. In contrast, the countries with the most independent peasant organizations, - Thailand and the Philippines – are the countries in which policies have been least favorable to villagers. *“To get the state’s attention in these countries, peasants practically, if not actually, must resort to armed rebellion”* (Kerkvliet and Porter, 1996:27-29). This would imply that the shift in the agricultural mode of production in Cambodia (liberalization), in the absence of peasant organizations or other forms of an indigenous civil society, has severely affected the power of peasants to communicate their concerns, hitting especially the more vulnerable ones.

The picture that emerges is one in which the dissolution of these collective forms of security, and the consequent bearing down of the full force of liberalization on a farming system in transition from collective agriculture to family land holdings, promotes economic growth as well as further impoverishment of the rural majority. In the absence of alternative employment opportunities outside agriculture, the aspect of agricultural productivity and access to and size of subsistence land gains prominence. This raises two questions. Primo, could – given a specific level of productivity - the increasing inequality in the rural areas be related to a shift in land tenure patterns? Secundo, could- given current land tenure patterns – agricultural productivity be substantially improved, in order to develop Cambodia’s comparative advantage in the agricultural sector and raise rural incomes overall? The first issue will be discussed extensively in section 5. Before turning to this point, the question of productivity will be discussed in some detail hereunder.

4. Agriculture

4.1 The importance of rice

The agricultural sector outsizes the rest of the economy. Agriculture and its related sub-sectors (live-stock, fisheries and forestry) employ more than three quarters of the active population, contribute some 45% annually to GDP, and account for more than 75% of the total recorded export volume. As stated before, with 85% of Cambodia’s population living in rural areas, rapid rural development will be crucial to raising incomes and reducing poverty. Will the agricultural sector be able to deliver the expected supply response? Given the relatively limited inflow of FDI into the sector, the thrust will have to be delivered by ‘home-grown’ productivity increases leveraged by domestic investment²¹. Agricultural development therefore necessarily makes up one of the most important thrusts of the Government’s rural development strategy. The emphasis on rural development is manifest in the 65:35 sectoral investment allocation targets for the period 1996-2000 between rural and urban areas (Socio-economic Development Status, 1995:11). The actual programmed allocations are fleshed out in the ‘Public Investment Programme 1997-1999’.

In the ‘Agricultural Sector Reform Program’, the Cambodian government clarifies the double thrust of its reform: an increase in agricultural productivity, esp. rice and rubber, and a public sector divestiture program (Kannan, 1997:16). The latter program, while leaving intact the government’s involvement in

agricultural inputs distribution, rice trading, and rubber marketing, is keen to privatise the six existing state-owned rubber plantations, in the hope of making rubber once again into a major export earner for Cambodia. There is still a long way to go however in realizing this, considering the long gestation time of investments in natural rubber and the previous neglect. In 1994, the output of 40,000 Mt of rubber was only 25% of the level achieved in 1967 (Socio-Economic Development Status, op.cit.:15). As to rice, it is not clear whether the government wants to shift rice from being essentially a non-tradable into a tradable by promoting it as an export crop. It was only in 1995, when Cambodia exported rice (120,000 MT) for the first time since the 1960s, that the country reached self-sufficiency levels in the 1990s. Next to the possible effects on food security, there is also the fact that the international rice market is an unstable residual market with highly variable prices, dominated by Cambodia's immediate neighbours Thailand and Vietnam. In this light it is hard to see how Cambodia, given current falling export levels, can continue to sustainably improve terms of trade if it does not steer clear of large terms-of-trade shocks.

Yet however looked at, the critical determinant remains boosting the productivity of rice cultivation. Indeed, its significance cannot be overestimated considering that most of the country consists of a vast central plain that lies within the catchment area of the annually overflowing Mekong river. The crop occupies 85 to 90% of the total cultivated land area of about 2 million ha²², provides 15% of the total GDP (cf. Table 1), and accounts for 75% of total caloric intake. Rice is important to the point even of stating that the *"welfare of most Cambodians is closely tied to their access to rice and the means to produce it"* (IRRI). As Ovesen writes about the pronounced personal and cultural identification between rice and people, *"the consumption of white rice is what mainly defines a human being"* (1996:40); to ask *'have you eaten rice today?'* is equivalent to asking *'how are you?'* Whatever could be more symbolic in this regard than - upon the reintroduction of the domestic currency in 1980 - using the price of one kilogram of rice as the standard to fix the value of one Riel (World Bank, 1996:5). However, as mentioned previously, the sector as a whole – apart for the rubber-plantations – is dominated by subsistence agriculture. Although in this latter regard Cambodia may not differ much from its neighbours, there is quite a difference in productivity (expressed as production per hectare). Productivity has generally been much lower than in neighbouring countries, as can be attested by Table 9 which shows that a hectare of rice in Cambodia yields less than 40% of its comparative yield in Indonesia.

Table 9: Cambodia's rice production in a regional perspective

	Cambodia	Thailand	Vietnam	Malaysia	Philippines	Indonesia
Total prod., (000 t.) '96	3,390	21,800	26,300	2,065	11,284	51,165
Yield, kg/ha '96	1,739	2,364	3,603	3,129	2,856	4,515
Prod/cap, kg, '93	330	371	350	100	163	255
Chemical fertiliser, kg/ha, '95-96	2.3	71	214	164	63	83
Rice produced /kg fertiliser used (kg)*	756.0	33.3	16.8	19.0	45.3	54.4

Remark: chemical fertiliser use in kg/ha based on arable land and land under permanent crops

Source: Sophal et al., 1998:55/*Own calculations, based on the data of row 2 and 4

²¹ Inter-sectoral factor mobility is not an issue in raising agricultural productivity, rather the contrary. As stated before, the sector is characterised by under-employment, which is indicated by the sectoral productivity decline of 16% between 1993 and 1996 (Cambodia Development Review, 1998:7).

²² A study on food security, using data of 3 villages from 3 different provinces, revealed that the shares of rice cultivation in total cultivated land were 99.6%, 95%, and 67.4%. The latter is the share of a fishing village that is inundated for 6 months every year (CDRI, 1997:15).

A cropping pattern in which up to 90% of households available land is used for a single crop, without generally achieving national self-sufficiency in the staple, suggests indeed that agricultural production has been extensive rather than intensive. Whereas nobody would deny the side-effects of a 45 times higher fertiliser use per kg of rice produced (cf. Vietnam and the so-called 'brown revolution'), the sheer extent of the gap that separates fertiliser use in Cambodia from that of its neighbours indicates the dormant potential. The intensity of input utilisation can also be measured by the use of irrigation and machinery. By all these standards, agricultural production technology in Cambodia recorded if not the lowest, then next to the lowest, intensity factor utilisation (Kato, 1998:20). Consequently, as Kanan states *"the growth performance of the agricultural sector has been dismal. This has been especially so in the case of rice production"*(1996:2).

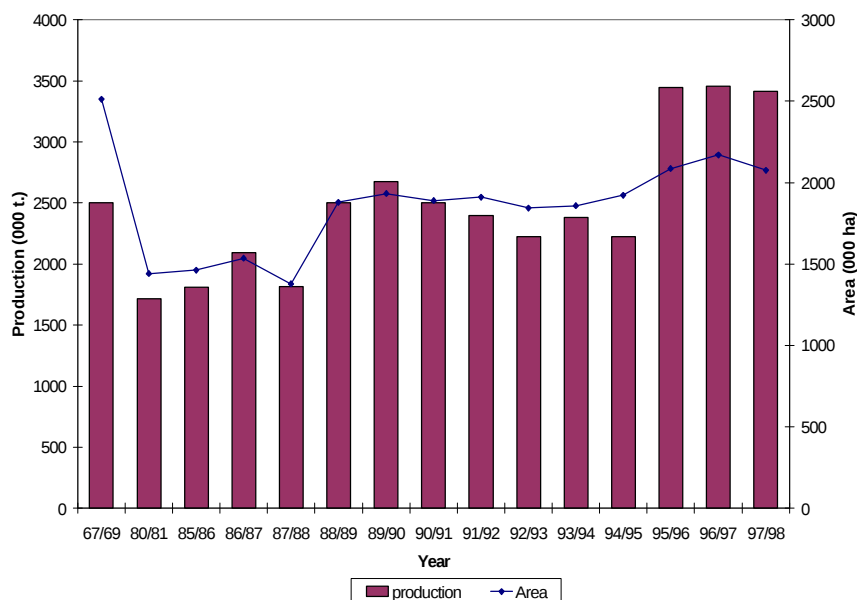
Yet, with some additional hindsight, the latter observation may have been too severe. Figure 6 based on the data of table 10 shows clearly how increases in production are closely related to increases in cultivated area (with some variation for the weather pattern), generally confirming the extensive nature of rice production. However, starting in the cropping year '95-96, there seems to be a marked trend towards intensification, as production increases clearly outpace the increase of area under cultivation. Starting in 1996, rice production in the nineties continued to exceed the levels achieved in the 1960s when Cambodia was a significant exporter. However, given the increased population, production/capita is still 20% lower in 1996/97 than in 1967/68.

Table 10

Year	Production ('000 t)	Area ('000 ha)
67/69	2500	2513
80/81	1717	1441
85/86	1812	1462
86/87	2093	1535
87/88	1815	1378
88/89	2500	1879
89/90	2672	1932
90/91	2500	1890
91/92	2400	1910
92/93	2221	1844
93/94	2383	1857
94/95	2223	1924
95/96	3448	2086
96/97	3458	2171
97/98	3415	2076

Source: adapted from Sophal et.al, 1998:54

Figure 6: Trends in rice production



Source: based on data of table 10

Table 11 gives an indication of the source and considerable additional scope for improvement, showing that the use of improved varieties and larger quantities of fertilisers in the dry season mean that yields are usually substantially higher than those in the wet season (FAO, 1996:3). With a mere 10.7% of the area harvested, irrigation-based cropping accounted for 16.1% of total production in '95-96. According to Sophal, irrigation-based double cropping of rice has expanded rapidly in the past years,

from 155,000 ha in 1993 to 248,000 ha in 1997 (1998:55). Combined with a production rate of 2.8 tons/ha for irrigated paddy, the cited expansion of irrigation-based double cropping would account for an increase of 262,360 tons over 4 years without any augmentation of cultivated area. Nevertheless, it should be borne in mind that over 80% of all irrigated land is concentrated in just four provinces very close to the capital Phnom Penh: Takeo, Kandal, Prey Veng, and Kompong Cham (Nesbitt, 1996:table 5.2). The population of Phnom Penh and these 4 provinces together account for 47.3% of the total population. In other words, this densely populated area - the hinterland of the capital - is where the integration of the peasantry into the market is most advanced.

Table 11: Production of paddy rice by type 1995/96

	Area harvested		Production		
	Hectares ('000)	Percent	tons	percent	Yield (tons/ha)
Wet season					
Early varieties	302 461	17.0	499 061	15.0	1.65
Medium var.	614 474	34.5	1 020 027	30.7	1.66
Late varieties	571 492	32.1	1 097 265	33.1	1.92
Floating paddy	71 616	4.0	168 574	5.1	1.63
Upland paddy	31 838	1.8			
Sub-total	1 591 881	89.3	2 784 900	83.9	1.75
Dryland paddy	190 500	10.7	533 400	16.1	2.80
Total	1 782 381	100.0	3 318 300	100.0	1.86

Source: FAO/WFP: 02/1996 (table 1)

4.2 Sustainability of the supply response

Can this type of supply response be sustained and expanded? Given that the agricultural sector is dependent mainly on family-based rice production, converting 'smallholder' households into an 'emergent' class of commercial farmers is of strategic importance²³. Yet the capacity to modernize and benefit from the opportunities of an evolving market economy may be limited. To take the apparent trend toward intensification, it cannot be extrapolated without offsetting the current estimated average – and comparatively low - cost of agricultural inputs per household per year of US\$211 (Prins, 1996:22) against a GDP per capita that is of the same magnitude. In other words, the sustainability of the supply response may lay ultimately with the limits of the rural development outreach itself, esp. commercial credit and public investments in rural infrastructure. In addition, the specific topography of Cambodia may put a number of natural obstacles in the way of a sustained intensification.

Increasing the input costs per hectare will require the provision of credit. Yet the outreach of loans in numbers (as against value) for agriculture in 1996 was estimated at a mere 3% of rural households who had access to land, compared to the 75% outreach of the 'Bank of Agriculture and Agricultural Co-operatives' in neighbouring Thailand (Prins, 1996:43). This is more or less consistent with data from the National Bank of Cambodia, which show agriculture's share in outstanding credit of commer-

²³ The emphasis on rice production should not eclipse from view the fact that two main farming systems are usually recognized as important in Cambodia: the rice-based farming system in the flat areas of the plain, and the *chamkar*, the multicropping farming systems along the fertile riverbanks and in parts of the Tonle Sap area. The *chamkar* is a polyculture, composed of a variety of crops grown for the market, and originated with the arrival of Chinese settlers from the middle of the 18th century onwards

cial banks to be limited to approx. 4.3% (Sopha et al, 1998:82)²⁴. A low share in combination with a low overall level of financial deepening (M2/GDP) – 7.7% as against 12.7% in Laos in 1995 (Kato, 1998:14)– signifies that the mobilisation of financial resources for investments in the agricultural sector can be said to be extremely limited. The consequent large role of informal moneylenders in the rural areas – to whom people turn not to finance investments but rather consumption in times of distress – has the perverse effect of pushing people off the land (cf. chapter V further on).

On the other side are the public investments in rural infrastructure, designed to enable the integration of peasants into the marketplace. To begin, there are the already mentioned general problems of aid and low cost loans to finance Cambodia's public investments: a certain donor fatigue, esp. after the July 1997 coup and the July 1998 election imbroglio, in an environment rendered more competitive by the regional economic downturn since 1997. Furthermore, although the sector of agriculture and rural development is scheduled to receive a 12.5% allocation of the PIP and the allocation within the sector is broadly consistent with the government's proclaimed policy, the *"linkage between the stated strategy and the proposed PIP should be strengthened"* (World Bank, 1997:34). In particular, in contrast to the emphasis given to rural development, not enough projects that specifically target rural development (canal rehabilitation, rural roads, rural credit services...) are programmed.

It seems however the case for a drastic productivity increase should not be overstated, in view of the vulnerability of the agricultural sector to weather conditions that crucially limit the potential for intensification, esp. considering the increasing degradation of the environment (loss of forest cover and soil erosion). As Figure 6 shows, rice yields vary significantly from year to year. A bad year (such as 1994) can decrease the annual contribution of rice cultivation to GDP in one fell swoop by 19.9%, when up to 29% of paddy rice production was lost. Table 10 gives an indication of the erratic nature of the growth rates of the sectoral contribution of agriculture to GDP. Management of water resources seems critical in a country where severe flooding and drought can follow one another in quick succession. Yet, the generally flat topography of Cambodia does not lend itself to economic water storage, and the massive rise and fall of the Mekong River level makes large scale pumping difficult²⁵. According to the World Bank, nowhere in Cambodia are there conditions suitable for economic development of irrigation schemes on a large scale, while an amalgam of small schemes would only have a modest overall impact on the sector (1996:41). This assertion however, seems not to take into account simple and cheap alternative strategies that may be employed to reduce the effects of 'mini-drought' periods on upland paddy - which, after all, accounts for almost 85 to 90% of land under rice cultivation. This includes the levelling of paddies, raising bund heights to retain water, and construction of small ponds for rainwater harvesting nearby nurseries (Nessbit, 1996:179; Solieng, 1998:77).

²⁴ In combination with the low level of financial deepening, the mobilisation of financial resources for investments in the agricultural sector can be said to be extremely limited. Although a number of NGO's are active in the field of rural credit, their activities cannot hope to replace the near-absence of commercial credit for the agricultural sector, as 'NGO credit schemes reach only 2.5% of Cambodian villages' (Nesbitt, 1996:16)

²⁵ During the monsoon season the overflow from the Mekong expands the Tonle Sap Lake, a central feature in Cambodia's geography, to up to 4 times its dry season area. This can lead to serious crop losses in years of severe flooding. In the 1994/95 season for example, floods caused losses of about 424,000 hectares (FAO, 1997:5). This would amount to roughly 20% of all land under rice cultivation (around 2 million hectares).

Table 12: Growth Rates of Agricultural Sector Contribution to GDP at 1989 Constant Prices

	1991	1992	1993	1994	1995	1996
Agriculture	6.7	1.9	-1.0	0.0	6.4	1.8
Crop & Rubber	7.2	-0.4	-2.3	-8.2	15.9	0.9
Rice	-4.0	-1.9	3.2	-19.9	24.1	-1.3
Other Crops & Rubber	29.9	1.9	-10.2	11.7	5.9	4.1
Livestock	1.2	7.0	3.0	3.9	4.1	6.6
Fishery	8.9	-5.9	-5.5	-1.7	3.4	-0.8
Forestry	24.6	15.1	0.0	50.5	-30.2	-6.7

Source: based on World Bank 1997

Another natural constraint is the relative abundance of poor soils; only 9% of the cultivable land in Cambodia is reckoned to have rich soils. According to FAO, there are few alternative uses for much of this low quality rice land (Nesbitt, 1996:14). Correspondingly, “a traditional practice has been to allocate different parcels or strips of land to individual producers...” (Tickner, 1996:18). This latter point highlights what is perhaps the most basic dilemma of engineering a transition from a ‘low external input/low returns’ to a commercially oriented agricultural economy. The small and fragmented nature of Cambodian landholdings is not so much inefficient as an agro-ecological insurance against the vagaries of the climate and – more in general - a way to ensure that the access to different quality of land (elevation, soil quality...) – and with it subsistence - is parcelled out more equitably²⁶. Peasant households – characterized by low incomes, little land, large families, highly variable yields, and restricted external opportunities - are both units of consumption and of production. From this viewpoint, according to Scott, the central existential dilemma of a peasant household is not to maximize production, but a guaranteed access to a subsistence minimum that will entitle it to reproduce itself (Scott, 1976:6). When investing in innovations, a subsistence-oriented peasant would tend to select low-risk technologies with low but reliable production, rather than high-risk technologies that optimise production (Solieng, 1998:18)²⁷.

4.3 A Malthusian trap?

4.3.1 Land pressure and land concentration

Problems may arise when the traditional cropping pattern collides with the limits to available land. In the established Malthusian view, this impact would be propelled by an exponential population growth that would exceed the growth of national income. Although there have been substantial rises in the investment-to-GDP ratio (cf. annex 2), the investment rate may still be too low to stave off real falling wages or unemployment. In 1995, the ratio was 22.4% of GDP. In stylised terms an investment rate of 20% is currently producing a growth rate of about 5% (Collier, 1998:17). With a current population growth of 2.4% (census, 1998), the implication is for a rising per capita income of 2.6% yearly. Yet,

²⁶ A Farming Systems Research in Pursat province shows 71.34% of farms to consist of 2 or more parcels, with maximum distance of 1 km from the homestead for 69.22% of farms (Shams et al., op.cit.:13)

²⁷ This in no way implies a limited capacity for innovation, but rather the contrary. Cambodian farmers over the centuries developed specialised rice production systems, e.g. for growing deepwater rice. Within the farm units, fields of different water availability were planted to varieties of different duration. And local plant selection and breeding produced approx. 2000 traditional varieties of rice identified as unique to Cambodia (Nesbitt, 1996:3)

unless investments raise demand for labour by at least the rate of labour force growth, falling wages or rising unemployment will still be the result²⁸. The labour force in Cambodia is expected to increase by 17.5% over the period 1997-2002 – or a total of 828,947 persons (an average of 165,795 per year) - in line with the population growth rate of 3.3% during the eighties (Sophal, 1998:50). In comparison, FDI created an estimated total number of 313,261 jobs over the 3 ½ year period August 1994-March 97, or an average of 89,503 per year (cf. annex 3).

The Cambodian case presents a picture of an economy urgently in need of consolidation. With insufficient creation of employment outside agriculture, agriculture will be forced to absorb the brunt of the increases in the active population, further reducing the availability of land per capita. This also implies that yields will have to increase at par with the population, in order to prevent a fall in food availability. Whereas roughly 2.3 million cultivable hectares now support a total population of 11,426,223, projections are that by 2020 there will be some 19,295,000 Cambodians (census, 1998:36). However, Cambodia does not have an abundance of agricultural land, as suggested by the number of 64 inhabitants per square kilometer (census, 1998:3). As a matter of fact, the total estimated rural population of 9,632,306 inhabitants (84.3% of 11,426,223, cf. census, op.cit:3) shares an estimated 2,300,000 ha of cultivable land, which gives approximately 0.24 ha per rural dweller or 1.25 ha per 'average' rural household of 5.2 members (census, op.cit).

Even so the scope for extension is extremely limited, considering large regional differences in the available rice land per household. In annex 4, data on total area planted to rice per province was cross-referenced with information on the number of households per province, to produce an estimate of available rice land per household in the diverse provinces. An estimate of the subsistence land size for rice cultivation per household of 0.92 ha – assuming normal weather conditions and reasonable post-harvest losses - may be helpful in putting the data on rice-land per household into perspective²⁹. Note that the estimated value of the subsistence rice-land size is very close to the calculated average rice land size for all provinces of 1.08 ha/HH.

To test the accuracy of the above approximation, the information produced by these calculations has been cross-referenced with the only available field level data on average landholding per household, by province. These are culled from the survey of Ahmed et.al (1998:37) conducted in 8 Cambodian provinces. As can be seen in annex 7, the data series are not identical, but their trend is quite similar, apart for one case. The divergence can be explained by several factors. Foremost, the data of Ahmed et.al take into account different types of land owned (agricultural, orchard, fishpond, homestead, other) by fishing as well as non-fishing households, whereas the calculations of annex 4 are based solely on the available rice land/household. As can be seen from figure 6, more than any other type of land (homestead, orchard...), the area of land brought under rice cultivation is subject to conjunctural fluc-

²⁸ It is generally agreed that investment rates of the order of 30% or more of GDP, are the necessary basis to emulate the growth performance that was characteristic for the NIC's until recently

²⁹ Based on the following calculations: a. (Subsistence rice requirement per cap.per year/rice recovery rate) x 5.2 = subsistence paddy production per household per year; b. Subsistence paddy production per HH per year/average harvest per ha per year = subsistence land size per HH; Application: a. (181kg/0.55)x5.2=1,711kg; b. 1,711/1,860=0.92ha/HH; 'rice recovery rate' of 55% includes polished rice yields from paddy (after drying and milling)(Nessbit, 1996:157); average rice consumption/cap/year is taken at 181kg, as weighted average of different figures of 162kg (Sham et al) and 200kg (WFP)

tuations. In addition, the standard deviation for Ahmed's calculated average landholding per household of 0.87 ha is itself 1.17. Nevertheless, on the basis of the rather close convergence between the trend of the two series calculated for 8 provinces, it can be assumed that the estimated values of (rice) land ownership for all provinces approximate the actual status of land pressure well enough³⁰. The information contained in annex 4 has been summarized in table 13.

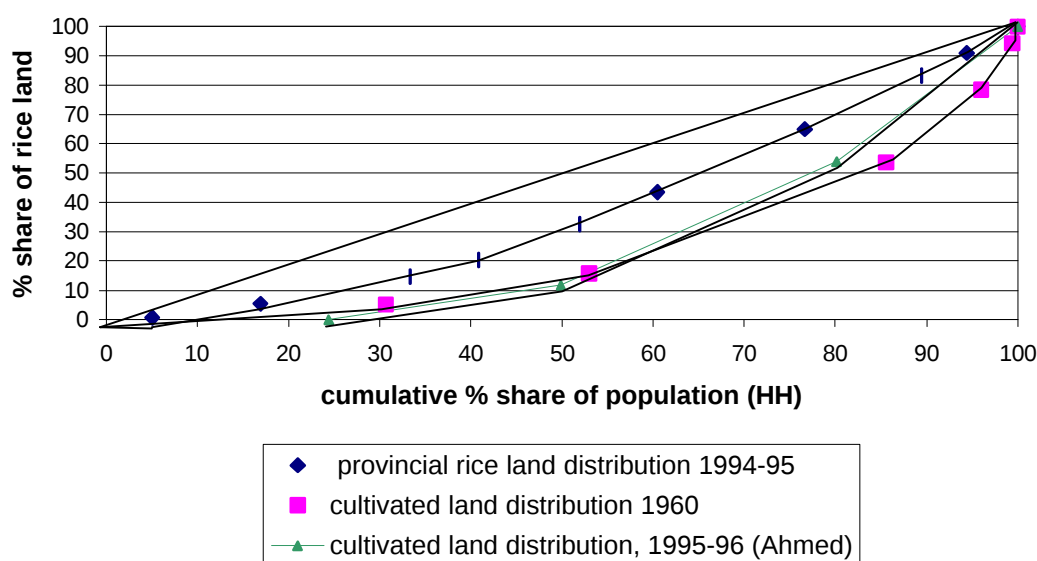
Table 13 : Land pressure in Cambodia

Rice land/HH (ha)	# of provinces ^b	Total HH (# and %)		Total area (ha and %)		Average rice land/HH (ha)
Land < 0.92	8	772,225	40.85	412,320	20.23	0.53
0.92 > land < 1.5 ^a	10	676,581	35.79	915,150	44.90	1.35
1.5 ≥ land	4	441,431	23.35	710,860	34.87	1.61
Total	21	1,890,237	100.00	2,038,330	100.0	1.08

^a Included here are Ratanakiri and Monduliri: 2 sparsely populated and forested provinces, where ethnic groups engage in swidden agriculture; there is however a large influx of settlers, esp. in Ratanakiri / ^b The IRRI data on available rice land do not include the provinces of Otdar Meanchey and Krong Pailin, which were under Khmer Rouge control until recently; Nevertheless, their population is very small (0.8% of total Cambodian population)

Given the lack of available details on the national distribution of land ownership by households other than aggregated per province, it is not possible to construct a Lorenz curve to represent the current degree of concentration of land in the hands of households. However, it is feasible to graphically represent the data of table 13 based on provincial averages of landholding per household, by rearranging the data provided by the estimates on land pressure per province. Classifying the provinces in ascending mode on the basis of average rice land/HH, and then associating their cumulated percentage shares of total rice land area and total number of households can accomplish this exercise, as has been done in annex 4, with the resulting series graphically presented in figure 7. What this series represents is the cumulated number of rural households (x) and area of rice land (y) as one progresses along the curve from the provinces with the highest to the provinces with the lowest land pressure.

Figure 7: Concentration of rice land on the basis of provincial averages (1994-95), and Lorenz curve for land distribution (1960 and 1995-96)



³⁰ Save for a divergence caused by a household's possession of non-rice land, the presence of a radically different farming system (Monduliri, Ratanakiri), and double cropping in the case of irrigated land

Although the two sets of curves in figure 7 cannot really be compared, since they do not measure exactly the same thing (cumulated individual ownership across provinces vs. cumulated provincial percentage shares of ownership), the Lorenz curve for 1960 and 1995-96 does provide an interesting perspective³¹. With an average land holding of 3.55 ha/family in 1960, as against 1.08 ha for 1994-95 (cf. annex 4) land pressure has certainly increased enormously. Yet, it can safely be assumed that land concentration then was at least as high as it is now. With 40% of families then owning barely 10% of all cultivable land, the 30.7% of farmer families that owned less than 1 ha had an average cultivated land area (rice + other land types) of 0.6 ha. Then as now, given the relatively stable nature of farm technology and household size, this was well below subsistence size. To do relatively better now with a much higher population shows once again the extensive nature of the informal land redistribution that took place with the decollectivisation in 1989. What the two curves do convey however, at least for the 8 provinces considered in table 16, is the relative worsening of the position of the worst-off 50% and the relative improvement of the intermediate group (50% to 80%). This seems to endorse the finding of table 8, that sees inequality in the rural areas on the basis of consumption expenditure increasing. There is a need for much more comprehensive data however, to resolutely confirm such a conclusion with regards to land access.

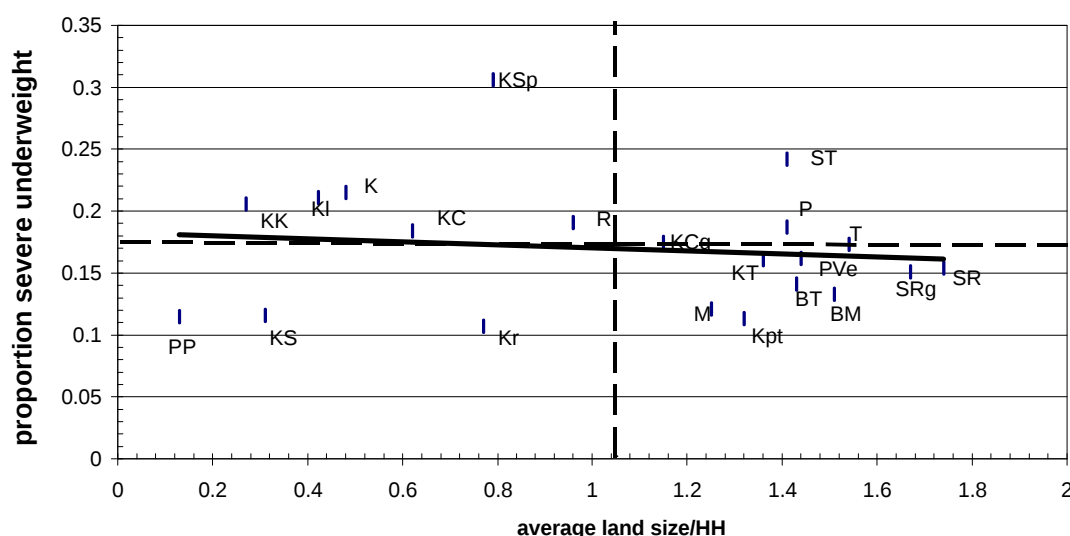
Although not intended to be more than an approximation in the absence of comprehensive field-level data, table 13 and its graphical representation in figure 7 prove to be quite revealing. Interpreting the findings with due consideration for the special cases of the provinces of Ratanakiri and especially Mondulakiri, given the low population rates and the prevalence of swidden agriculture, indicates there are three large groups. About a third of Cambodian rural households is able to cope (subsistence rice land between 0.92 and 1.5 ha), with about another third experiencing relatively little to no land pressure (more than 1.5 ha). While not omitting from view the role and intensity of *chamcar*-agriculture on tiny parcels of land and the possible effect of irrigated double cropping, more than a third of Cambodian rural households is confronted with a level of land pressure (subsistence rice land less than 0.92 ha) that risks to jeopardise even the most basic level of rice-based food security, esp. in the case of adverse climatic conditions. This can be seen clearly in the relevant series of figure 7. If these findings are projected onto a map of Cambodia, as has been done in annex 8, a clear pattern seems to emerge, with distinct categories and dynamics. Acute land pressure is confined to a strip that - stretching across southern Cambodia - accommodates 40% of the population on 20% of the cultivable land. Two other provinces are very close to this level of pressure on cultivable land: Preah Vihear and Ratanakiri. Households in the (north)western part of the country seem comparatively well-endowed with cultivable land, esp. the area where the remnants of the *Khmer Rouge* were hiding out until shortly. Surprisingly, the same seems to hold for three provinces wedged between the strip of intense land pressure and the Vietnamese border, 2 of which - in addition - account for 76.88% of all irrigated rice land in 1995: Prey Veng and Takeo. As a whole, the provinces that constitute the central rice-plain (surrounding the central geographical feature of the Tonle Sap Lake) seem relatively free from extreme land pressure (transparent, dotted blue, and blue areas on the map).

³¹ The curve for 1995-96 is based on the data represented in table 16; because it is based on only 8 provinces and a limited number of categories, it cannot be considered representative for the whole of Cambodia nor finetuned enough. Yet these 8 provinces do add up to 54.59% of all rural households and 46.11% of all rice land (annex), important enough not to omit the information. In this sense, the 1960 'national' curve allows to put the 'limited' 1995-96 curve in perspective by providing a benchmark

4.3.2 Effects of land concentration on food security

Assuming the subsistence size of the household rice land plot to be rather closely related to overall malnutrition rates, the figures on available rice-land per household are related to data on the ratio of severely underweight children (0 – 5 years) per province (CHDR, 1997:table IV.2). It should be noted that this relation is also indicative of the effect of subsistence land size on 'food-poverty' (the ability to provide the minimum amount of calories). The scatter-chart (figure 8) shows the relation rather well.

Figure 8: Proportion of severely underweight children (0-5 yr.), 1996, by average rice land size/HH (per province), 1994-95



Source: x-axis, calculations of annex 4; y-axis, Cambodian Human Development Report, 1997:table IV.2

Drawing a line through the average value for both variables in the middle of the trendline (1.08 ha riceland/HH, 0.162 proportion severely underweight children) divides the chart in 4 quadrangles. Six of the nine provinces with below-average values for rice land/HH are found in the upper left hand one (higher than average malnutrition effects), and ten of the twelve provinces with above-average values for riceland/HH in the lower right hand quadrangle (lower than average malnutrition effect)³². Of the 4 provinces that do not respond to this general trend at all (Phnom Penh, Kampong Som, Kratie, Stung Treng), two cases can be easily explained, as Phnom Penh and Kampong Som are the most urbanised and industrialised. In other words, gaining a livelihood outside agriculture is a more solid alternative. This leaves unanswered why Kratie- with a very low subsistence land-size - seems to be doing so well in terms of food security. In the same vein, it would need additional clarification to establish why Stung Treng (and Kampong Speu, even though it is in the 'right' quadrangle) seem to have much worse average values for severe underweight³³.

³² If abstraction would be made of the somewhat artificial effect of Phnom Penh in the calculation, the trendline would show an even more pronounced effect of land size on malnutrition.

³³ Interestingly, a corresponding variance can be found in the value of the HDI-indexes per province, which partly reflect the provision of public goods that promote human development. Whereas Kampong Speu is second to last with a calculated value of 0.280, Kratie with a value of 0.668 is topped only by the urbanised provinces of Kampong Som and Phnom Penh (Human Development Report, annex III.1).

The answer may come from two different factors. First, considering the earlier presented picture of intensification of agriculture, it turns out that of the total area planted to rice per province (Nesbitt, 1996:77), 20.3% is dedicated to dry season (irrigated) rice in Kratie, whereas this is 0% in Stung Treng and 1.1% in Kampong Speu³⁴. Second, although paddy land may occupy up to 95% of a household's agricultural land, there are alternative ways of raising income through agriculture (and purchasing rice) when rice land size is severely deficient or even zero in the case of landlessness. In this instance it is important to point to the importance of income raised on the basis of homestead land and water (fruit-trees, small livestock, fishponds...) and common property resources. Available data for Kandal province for example – with a very high land pressure - show how the source 'homestead land and water' accounts for 67.15% of average gross annual income per household (Ahmed et.al, 1998:table 3.23). Yet, as will be elaborated in more detail further on, especially common property resources (CPR) are under increasing pressure, and the benefits derived from them are bound to decrease.

4.3.3 The future: a Philippine scenario?

Given the earlier cited trends in population increase and employment creation outside agriculture, land pressure is certain to increase. The mounting land pressure will be reflected esp. in a weakening correlation between the size of landholdings and the household size, in view of the fact that the initial land distribution was made on the basis of family size (cf. Chapter V). The findings of the 'Farming Systems Research' in Pursat (Shams et.al. 1995:6) could be edifying in this regard. Of the four villages surveyed, only one could be found where the family size still had a significant relationship with the size of the rainfed lowland rice area held by the household. The long term effect of this general drift, is to put increasing pressure on households in those crucial areas where the availability of land is – for the time being – a relatively manageable problem. Notably so in the central rice plain surrounding the Tonle Sap Lake, where 6 provinces account for well over a third of all Cambodian rural households. This is especially so since there is no geographical overlap between this area – which is north-west of Phnom Penh- and short-term possibilities to engage in double-cropping, as almost all of the irrigated (dry season) rice is harvested from the area south-east of Phnom Penh. An additional obstacle that limits the scope for further extending the cultivable area is the presence of land mines. In the Cambodian case, mines are not specifically concentrated in particular areas, neither were they placed according to recognisable patterns, while some are linked to booby-traps³⁵. The Cambodian Mine Incident Report for 1997 estimates that 301,128 hectares are lost to production in this way, an area that – if all of it would be cultivable - would allow almost the same number of families a form of subsistence.

For all these reasons, it is clear that the essential supply response from the agricultural sector is inextricably linked to a long-term intensification of factor utilisation and a higher return on household as-

³⁴ This makes one wonder to what extent the better provision of public goods such as education, piped water, and health care in Kratie, is the product of an effort of collective self-determination, given that irrigation typically requires a host of interlinked agreements between end-users

³⁵ Even if they were placed in patterns, mines may change location due to the moisture content of the soil, and may be carried by streams. Silting may cover existing indications of mines. In addition, the issue of unexploded ordnance is larger than mines alone. It includes live bombs, rockets, and shells the Americans dropped in the early 1970s, and which continue to kill. The situation is comparable to Laos where the most common killers are

sets, while halting the short-term process of pauperisation of broad segments of the rural population. With the access to land eroding, the means to enhance rural development via leverage on household production factors are greatly diminished. The alternative is the Philippine scenario, where land concentration has created an 'underclass' of landless tenants and labourers. The main question then becomes whether economic development will indeed, as Boserup predicted, work out its own institutional solution if left to itself. The 'New Institutionalists' (North, Bates...) adhere to the view that central to this institutional solution are property rights or, in a subsistence economy, tenure systems. How then, does the interplay of fast economic change and the slow maturing of tenurial rights affect the process of broad-based rural development? Can agricultural development combine growth with equity? The increasing land pressure would put pressure upon existing social and economic arrangements by which the population is supported by land. With no new land available and few other employment alternatives besides agriculture, do not changes in the land tenure pattern conform more closely to a zero-sum game, in which the growth of assets held by one risks to be at the expense of another?

5. Land Tenure

5.1 Introduction

The position of Cambodia with regards to land tenure is exceptional. The country has undergone successive waves of tenure modernisation, complete collectivisation, and re-privatisation. After the proclamation of Year Zero by the victorious Khmer Rouge (1975), families were deliberately separated and the entire population was marched out of cities and villages at gunpoint and regrouped in the countryside in collective work-brigades. Barely five years onwards (1979), the entire population - in search of lost family and a home – spilled over the countryside once again. It is hard to grasp the magnitude of the fact that every single Cambodian older than 18, has been displaced once or more during their lifetime. Ten years later, the constitutional reform of 1989 basically accepted and legalized the informal resettlement that resulted from that period of momentous confusion. In addition, in 1992-93 nearly 350,000 Cambodians were returned to Cambodia and resettled through UN efforts after more than a decade of exile. These people had fled the civil war that ensued in the period 1979-89 between resistance factions and the government after the Vietnamese invasion. Of the refugees who returned from the Thai border camps, nearly 60% decided to relocate in the northwestern provinces. It is estimated that nearly a quarter of the population in the two provinces of Battambang and Banteay Meanchey is made up of refugees (Cambodian Human Development Report, 1997:6). To make matters even more complicated, a large area on the Thai border around the town of Pailin remained until 1996 under control of hard-line Khmer Rouge, who issued their own 'revolutionary' land titles (Cambodian Daily, 18/4/98). Nevertheless, however perplexing the land tenure situation may appear to be, *"land privatisation and the parallel measures towards market liberalisation are the most important aspects of government economic reform affecting the agricultural sector"* (Ratner, 1995:9).

US anti-personnel cluster bomblets, such as the BLU-26 which contains '100g of high explosive and 300 ball-bearings embedded in a steel casing' (Guardian Weekly, 04/10/98:25)

Cambodia's push for a market economy in which land is an increasingly marketable commodity, has emphasised the need for all landholders to gain authorized recognition of their rights. As if to complement the unqualified urgency of this need, the 'Land Titles Department' (LTD) was promoted from the status of dusty bureaucracy to that of top-notch administration. Founded in June 1989 under the Ministry of Agriculture, it was organized directly under the Council of Ministers on 3.10.1994. This promotion brought into full public view the backlog of 4 million land title applications. With such a discrepancy between law and reality, it is no wonder that *'only family disputes outnumber land conflicts in the court system'* (Cambodian Daily, 18/4/98). The main reason why the current Land Law of 1992 does not satisfy the needs of a modern Cambodia integrating into international markets, is mainly that it inherits three very different concepts of land tenure which it synthesises poorly. In order therefore to understand better the discrepancies between performance and prospects of the agricultural sector, a brief historical overview of the consecutive tenure systems is needed.

5.2 Historical overview

After independence (1953) a general degradation of land access for Cambodian peasants followed the initial colonial effort to privatise the economically most viable parts of the traditional collective domain. A brutal imposition of total and radical collectivisation eradicated abruptly the very principle of an alienable domain, to be replaced later by more flexible collectivisation policies, with the collective domain finally to be re-allocated to individual families. First informally, then with official government fiat starting in 1989, capped by the promulgation of the 1992 Land Law and the ongoing process of land titling.

The synopsis in Table 14 gives a brief overview of the main changes of the property rights regime pertaining to land in Cambodia.

Table 14: the history of tenurial rights in Cambodia

Property regime	Period	Collective ownership	Individual possession	Individual ownership	Concessions for foreign companies
Pre-colonial	- 1863	In the hands of the king	✓	-	-
Colonial	1863 - 1953		✓	✓	✓
<i>Sangkun/L.Nol</i>	1953 – 1975		✓	✓	✓
Khmer Rouge	1975 – 1979	In the hands of the state	-	-	-
Krom Samaki	1979 - 1989		Home lots only	-	-
<i>Krom Prewas Dey</i>	1989 – 1991		✓	-	-
UNCTAD period (Land law 1992)	1991 – 1993		✓	Home lots	-
Constitutional Monarchy (Land law '92)	1993 – now		✓	Idem	✓

5.2.1 Land tenure: the traditional concept of property rights

The traditional principle of land acquisition, assembled into the traditional codes ('*Kram*') is that of 'acquisition by the plough', in which an individual or household takes what is needed for subsistence without stifling the collective rights of the community. As Greve states: *"In ancient Cambodia (prior to the French protectorate starting in 1863) there was in a sense a system of dual property rights"*

(Greve, 1993:6). Theoretically, all land belonged to the sovereign. In practice, it belonged to the one tilling it. However, the non-cultivation (or utilization, in case of a house) of a piece of land for more than three consecutive years meant the dissolution of any rights pertaining to that land. The system therefore allowed for possession as a kind of 'mobile right', but not ownership. Not only was this a (fiscal) stimulant for the sovereign to see to it that land was maximally occupied: the flexibility and informality of possession allowed the maximum number of people to work the land at any given time. At the same time the system prevented outsiders from exploitation and speculation of natural resources by ideologically investing one person with all property rights bundled into a system of common heritage. This view represented also a cosmological vision: the *deva-raja* (the sovereign) represented the intermediary in maintaining the harmony and balance between divinity and human beings³⁶.

5.2.2 The French protectorate

The Cambodian Civil Code of 1920 of the protectorate (1863-1953) on the other hand, heavily influences the current policy towards property rights. Then as now, the government wanted a general registration and a national cadaster system. Then as now, the bottomline consisted of stable production. For this the French required assurances that the land would be formally protected by the state from outside parties, and would be theirs for an identifiable and defined amount of time. The principles of land ownership, that is the registration of title of particular parcels of land in favour of an individual on proof of ownership, were established in the Cambodian Civil Code of 1920 (Cambodian Property Law, 1998:9). To prepare the ground, a Convention in 1884 declared invalid the principle of exclusive royal property of all Cambodian land, recognizing next to the royal domain, a public and an alienable domain. The declaration foresaw a general surveying of all cultivated land that sought to anticipate the introduction of private property (FAO, 1994:5). The hallmark of this system, contrary to the principles of the '*Kram*', is that all unoccupied areas are considered as 'free' and become available for sale. Nevertheless, the priority in surveying was clearly to integrate the land with a high economic potential into the cadastral system: the pepper plantations of Kampot, the rubber plantations in Kompong Cham, the peri-urban province of Kandal (incl. Phnom Penh) etc. From 1928 to 1936, a total of 605,700 ha were licensed (FAO, 1994:7). In this light, it brooks no wonder that the formal registration system and the old Cambodian code continued to coexist, given that the majority of regions remained un-surveyed.

5.2.3 From independence to 1979

The legal concept of private land ownership resulted in the weakening of the traditional Cambodian agricultural fabric. With the launching of the hazy path of 'Buddhist Socialism' in the mid-1960s, then Chief of State Prince Sihanouk – like Nasser of Egypt and Nehru of India - embarked on an adventure of 'non-aligned' state socialism and monopoly. After 40% of the rice harvest was smuggled to Vietnam in 1966, the state ensured forced collection of the rice harvest at below market prices. In addition, a program of forced 'Khmerization' was directed at the provinces inhabited by the so-called hill-tribes:

³⁶ Each year, a ceremony is held near the palace in Phnom Penh, that is reminiscent of this divine intermediation. Using a pair of 'royal' oxen, the king plows a piece of land; an act that will supposedly bless Cambodia's farmers with good harvests

lowland Khmer were resettled, and land was forcibly redistributed³⁷. Usury and indebtedness seem to have played an increasing role in corrupting further the situation. Ethnic Chinese were the traditional money-lenders in the rural areas, and the interplay of usury and the principle of private land ownership wrought havoc in the creation of a class of landless peasants (FAO, 1994:7; Greve, 1993:7; Cambodian Property Law, 1998:9)³⁸. The Khmer Rouge propaganda cleverly sought to exploit the growing friction. However, it was not until the overthrow of the Sihanouk regime by Lon Nol in 1970, the start of US saturation bombing and the invasion by 50,000 US and South Vietnamese troops of south-eastern Cambodia (in search of the so-called 'Red Pentagon') that a fertile ground for Khmer Rouge recruitment was established³⁹. In Phnom Penh alone, about 2 million displaced people from rural areas had sought shelter. Nobody though, could have predicted the aftermath of K.R. victory in early 1975. With regards to land access, the national domain was utterly transformed. In striving to re-establish the glory of the hydraulic economy of the ancient *Angkor* empire, the whole population was effectively reduced to slave labour in a program of public works that sought to subdivide the country in squares of 100 m, with an irrigation canal every 1 km. Not only were functional small-scale irrigation systems destroyed, an estimated 2 million of the 7 million people perished in the attempt to turn Democratic Kampuchea into an agricultural autarchic superpower, making the Cambodian communist revolution the most deadly per capita.

5.2.4 Solidarity Groups (1979-1989)

After numerous cross-border attacks by the Khmer Rouge into Vietnam, Vietnamese troops entered Cambodia at the end of 1978. In this, "*Cambodia has the doubtful distinction of being the only country where the Marxist regime was overthrown by another Marxist government with the help of a Marxist neighbour (Vietnam)*" (Ear, 1995). During their retreat, the Khmer Rouge pushed part of the population towards the forests on the Thai border, which subsequently became and remained 'enemy-land' for the Vietnamese. Others drifted across the country, looking for their family. The period of 1979-80 is one of progressive reinstallation and, to a certain extent, rural exodus⁴⁰. With a severe famine looming, the authorities ordered everyone to settle down; many at that time were back in their home villages, many were not. Given that people were generally not free to move, the initial resettlement pattern determined later land tenure patterns. The newly proclaimed 'People's Republic of Kampuchea' continued the line of collective property rights: people were divided in collective work forces of 12 to 15 families with an allocation of between 15 to 25 ha – the '*Krom Samaki*' (Tickner, 1996:20). The government foresaw three types of '*Krom Samaki*', according to the degree of collectivization. It ranged from fully collectivized (type 1), to collective organization of work and ownership of costly means of

³⁷ In the early 1960s the Sihanouk regime began to force highland villages in Ratanakiri to move from the bamboo forests to more 'orderly' concentrations among the highways. The government's agenda was to rein in the indigenous people and cut off contacts with Lao, Vietnamese and Khmer insurgents, while modernizing the minorities at the same time (Colm, 1997:30)

³⁸ It should be stated however that the conclusion is not based on recorded data, since these were all destroyed by the Khmer Rouge, but rather on a number of anthropological studies. Conway fights such a judgement on the ground that ethnic Chinese could not own land, and that land markets were fairly stagnant at the time (Conway, 1993:91). Quite probably however, as is the case to a large extent now, property was accumulated in the hands of government officials. In 1968 for example, new legislation gave the central government power to appoint sub-district chiefs, marginalizing the local administrations.

³⁹ For those interested in the subject, refer to the bibliography in Chandler 1993.

⁴⁰ The Khmer Rouge had especially targeted urban people, as they were seen as party to the exploitation of the rural poor. The majority of current inhabitants of Phnom Penh is considered to be of rural origin.

production such as draft animals (type 2), to a voluntary unit of collective labour (type 3). By 1987 there were 98,000 such groups, with more than 80% reportedly level 2 groups, effectively operating like associations of private farmers. It is interesting to note though that the most collectivised '*Krom*' were to be found in the poorest areas, where upland rice was grown, such as Kompong Chnang and Kompong Speu (FAO, 1994:10). In contrast, in the very profitable '*chamcar*' areas (Kandal, Kompong Cham), there was a distinct preference for the most flexible type 3 *Krom Samaki*. In some areas in Kompong Cham (district of Chamcar Loeu) solidarity groups never even existed. In 1989 collectivisation was officially abandoned and private ownership reintroduced. The authorities urged the solidarity groups to divest themselves of the collective means of production, and the concept of '*Krom Samaki*' was changed into that of '*Krom Prowas Dey*' or co-operative labour exchange groups (Greve, 1993:11). Families were more or less provided with the same amount of land they had been farming under the solidarity groups, subject to some restrictions on size and the creation of a land reserve on village and sub-district level. Making sufficient provision for the fact that the amount of collective land allocated for solidarity groups varied substantially, at least between members of a former solidarity group land distribution was fairly equitable (FAO, 1994:10). The land was distributed according to entitlement considerations that paid attention to the different types of land available in the '*Krom*' and the labour force available in a household.

It is important to underline that, as the official decollectivisation signalled the formal recognition once again of an alienable domain, initial differences in well-being between households would have conformed quite closely to differences in their initial conditions (availability of labour and draught animals). In a case study of 2 villages, Prey Beng and Toeuk Lich (Kampong Speu), Be et al. assert that "*everyone, old or young, man or woman, except government employees, received 20a to 23a (about 0.2ha) according to the availability of land. Those who were born after the distribution-day did not receive land at all*" (Be et al., 1993:10). An exception has to be made however for female-headed households, as mentioned in most of the literature. Even taking into account the smaller family size of female-headed households (4.66) than male-headed households (6.07), the research in Pursat shows the per head land availability to be lower in female headed (0.20 ha) than in male headed (0.242 ha) households (Shams et al., op.cit:10). This difference exists for all types of land. So, although the legislation does not make explicit gender biases, there is anecdotal evidence suggesting biases in land distribution that have affected women's access to land.

5.3 The current situation

Two factors have spurred an increased attention for the legal environment for land access and land use in Cambodia in recent years. On the one hand, there is the legal basis of market-driven agricultural development, on the other there is the surge in land disputes. The underlying part will first take a look at the legal framework itself, before considering in some detail the performance of the land market.

5.3.1 The legal framework for land and land use

5.3.1.1 An outline of the land law⁴¹

Relevant land law is complex and not entirely clear. At present, there are no less than five main sources of land law in Cambodia, one of which is the National Constitution of September 1993. The others are Sub-Decree No.25 (Council of Ministers of the People's Republic of Kampuchea, 22/04/89), Instruction No.3 (Council of Ministers of the State of Cambodia, 03/06/89), the Land Law (National Assembly of the State of Cambodia, 13/10/92), and the Law for the Management of Urbanization and Construction (National Assembly, May 1994). The reason for this lack of focus is the transition provision in the Cambodian Constitution (art.139), stating that previous laws that safeguard private property shall remain in effect if 'in conformity with the national interests'. The Land Law of 1992 is therefore the principal law applying to land. As the World Bank states: *"although there is nothing in the 1992 Law which preserves earlier decrees, sub-decrees, and political instructions, current administration is based on the assumption that many of these are still effective"* (World Bank, 1996:42). To a certain extent this is so. Whether or not Sub-Decree 25 and Instruction # 3 are in effect today, the 1989 laws could still be applied in cases where the right to claim possession or ownership first arose under those laws. Secondly, however incorrect this may seem, the courts do continue to apply these 1989 provisions (Cambodian Property Law, 1998:7). It is no surprise that – with the question of legal precedence not clearly settled – major contradictions show in the legal framework, the capital one being on ownership vs. possession of land.

The most significant provisions in the Land Law are articles 1 and 2. Article 1 contains the significant provision that the State does not recognise land property rights that existed before 1979. This means that the possible land ownership rights existing before the nationalisation of all land in 1975 by the Khmer Rouge will not be returned. These articles also determine that all land in Cambodia belongs to the State, and that Cambodians have the right to possess and use land which – it must then be surmised - they do not technically own. The provision that Cambodians have the right to possess land contradicts article 44 of the Constitution that provides that all Cambodians have the right to own land⁴². In addition, the Law on Investment recognises explicitly the land ownership rights of Cambodian citizens in its article 16. Interestingly, the provisions of Sub-Decree No.25 have introduced a distinction in Cambodian law between rights to residential land and rights to agricultural land, meaning that the rights of possessors depend partly on whether the possessed property is residential or agricultural in nature. Residential land can be owned, agricultural land can be possessed. To add to the confusion, articles 62 through 74 of the same 1992 Land Law that excludes private ownership in its opening articles, establish the criteria for a temporary possessor to become the legitimate owner of the land. Basically, undisputed peaceful temporary possession of untitled land for 5 consecutive years, entitles the temporary possessor to become the legitimate owner of the land! If the temporary possessor has abandoned the land in question for three consecutive years, the land shall become a private

⁴¹ Although a new land law has been presented for discussion to the Council of Ministers, it is of course not clear what its final terms will be nor how much time will pass before its promulgation. Until such time, the legal framework for land use continues to be guided by the 1992 land law

⁴² Proprietorship (*kamasit*) is the right to manage absolutely and solely any property. Temporary possession (*phoukea*) means the act of having an exclusive possession of any property and completing all actions toward that property as an owner would do (Meijers, 1996:2).

domain of the state (article 76). In this regard, article 70 states explicitly that leaving the land fallow for fertilisation purposes cannot be considered abandonment. Surely, this is a reference to agricultural land (from this it also has to be deduced that retaining the ownership of residential land does not require continued use). To enable an active land market, article 73 allows temporary possessors to transfer their right of possession, just as an owner can, through contract or succession.

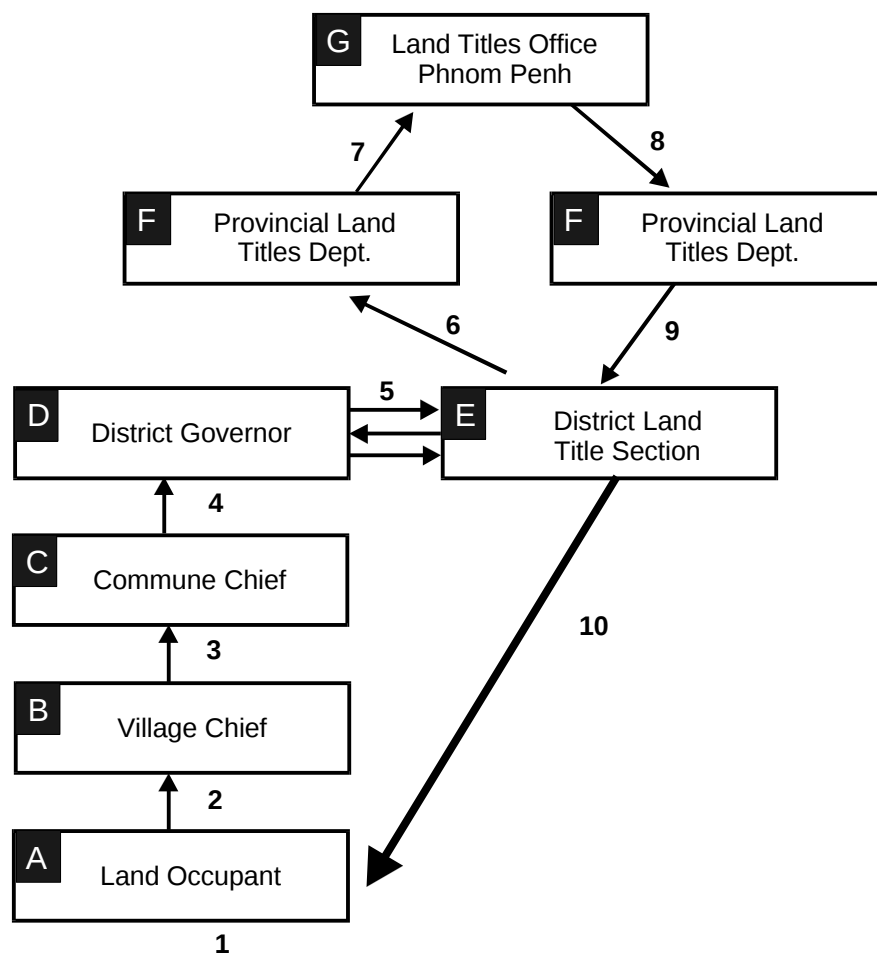
To sum it all up, the underlying basics of Cambodian land regulations are that the state owned all land in 1979, holding it in trust for its people and allocating it according to need. All private ownership then is to be established by possession of state land (FINNMAP, 1997:7). The temporary possession right is very similar to ownership rights in terms of the so-called 'usus' and 'fructus', although not in terms of 'abusus'. Theoretically a possessor cannot treat his land in any way pleased, without forfeiting possession rights under certain conditions (abandonment). Whether possession rights can be upgraded into ownership rights is not conclusive for agricultural land, since different texts are contradictory. For residential land this ownership is unequivocally stated. What is (theoretically) certain is that the non-occupation of land under conditions of temporary possession may lead to a return of the land to the domain of the state. In essence this means that the government revokes access to land on ground that it is not being 'used' to the government's satisfaction. It is clear that different aspects of all previous land regimes are poorly synthesised in the Land Law of 1992, rendering it inaccessible. Things only become clearer with the knowledge that this law is supposed to outline a transitory situation. The possibility of establishing private property in land has been linked directly to technical considerations, that is the registration and recordation ('cadastrage') of land and the distribution of titles.

5.3.1.2 The establishment of a national 'cadastre'

In 1989, at the start of the land privatisation phase, all Cambodians were asked to register their land. In a few months time, 4.2 million demands were lodged with district cadastral offices. The second phase, recordation and issuing of titles, has barely advanced since due to a limited surveying capacity and the weight of the millions of applications which have been lodged in the system for years. As the Director of the Land Title department stated in 1995: *"of the total 4,436,877 applications applied for since 1989, only 692,666 Reports of Investigations into the plans of land have been made while only 448,678 Certificates of Rights of Ownership or 10% have been issued"* (Voan, 1995). In essence therefore, only 10% of the work, which is basically bringing the actual pattern of land occupation under factual state control, has been accomplished. The concrete process and procedure for examination of the application and the issuance of a land title certificate have never been quite specified by decree or other. Nevertheless, based on practical information, the current system and process can be summarized in figure 9. In short, the process seems long, cumbersome (requiring 9 signatures from local to national), and non-transparent. The system is too centralised, and the procedures entail too many separate echelons and decision-makers. Each step in and of itself is not very time consuming, but at each stage there is likelihood for delay caused by backlog of work, absence of officials, or clerical error. Once confusion develops in this many-staged process, it is very hard to resolve and troubled cases cycle up and down in the system. At a time that market reforms are increasing the demand for agricultural holdings and that improvements in wealth and population pressures are increasing the

demand for residential property, registration bottlenecks and problems with land identification are causing considerable delays.

Figure 9: Steps in obtaining title to agricultural land



(Source: Colm, 1997)

In linking the legal framework to actual land market activities, four elements are noteworthy. First, to expound on the above citation of Voan, is the fact that about 90% of the more than 4.4 million families who applied for a land certificate by the end of 1995 have never been issued land certificates. So they only have a receipt of application to verify their prerogative of ownership. Because there are no verifications of the authenticity of the applications, there are frequent arguments in which two or more parties have obtained receipts for the same piece of land (Cambodian Property Law, 1998:110).

Second, the application lacks any kind of geometric relation or cadastral index map, only a drawing of the approximate location of the area (FINNMAP, 1997:18). Needless to say, this situation will hardly help to suppress boundary disputes. By the end of 1995 the LTD had delivered 450,000 land titles without undertaking any related mapping activities.

Third, possession or ownership are not valid without registration, respectively in the 'temporary possession register' and the 'real estate register', and property rights are only protected from third parties after registration. Land 'possessors' frequently view the receipts as title certificates, so they are com-

monly exchanged when land is sold or pledged as collateral for loans. Several articles in the land law and contracts decree # 38 specify that the person who records first, will be recognized as the legal owner of the property. This builds in a vulnerability to someone else taking title to someone's property, due to a failure to register. Not an imaginary danger, knowing that people frequently do not register their property in order not to attract taxes. One case study in Kdey Chass village (Kandal Province), revealed that the headman of the village knew of only 2 cases where a land transaction had been notified to the authorities. To appreciate the meaning of this information, it should be considered against the specific background of Kandal: a very acute land pressure and therefore a strong market pressure, with 45% of rice land irrigated (Nesbitt, op.cit. table 5.2) and therefore high marketability. Fourth, the system fosters corruption. *"Presently... land titling activities can only be provided to customers who can afford the service... The current lack of transparency supports the strongly-protected secretive approach to administrative procedures, which requires mediators who are initiated into the mysteries of the procedure. This effect creates dependence on the services offered by such mediators"*(Land Management Project, 1998:6). The major problem may not be so much the legal framework itself, as the cost of cycling through the registration procedure in order to get a title⁴³. It is estimated that a title application for a 600m² parcel valued at \$700 would total \$14, or about 2%. This is consistent with the 2% commission on the land value charged by brokers in Phnom Penh to cover costs incurred during the title application process (Cambodia Daily, 18/04/98:20).

5.3.2 The functioning of the land market : 'Lok sre chol krong'?⁴⁴

5.3.2.1 Introduction

All that is available are possession rights. However, this has in no way prevented the functioning of an active land market, as farmers do not distinguish between ownership and possession. The application receipt is considered and used as a land title⁴⁵. The differentiation between ownership and possession rights may be negligible, since possession rights appear to be exclusive, tradable, enforceable, inheritable and enduring (Colm, 1997:29). In a 1997 survey of 2756 different villages in 16 of Cambodia's 21 provinces, 1222 villages (44.3% of all surveyed villages) were reported to have families who sold agricultural land. The average % of households in villages reporting sales was 7.86 (WFP, 1997:16)⁴⁶. In this regard, the World Bank does not share a 'pessimistic' view on the ownership issue, in the sense that *"the lack of title and a lack of clarity in the law are not generally a priority constraint for agricultural development in the short term"*(Prins, 1996:93). Yet an active black market in land does not foreclose the necessity for adequate legal approaches to land tenure issues, because economic development has brought about a more complete appropriation of space where even unoccupied land is 'owned'.

⁴³ Per discussion with Ms. Ratha Panh, Legal Advisor 'Dirksen Flipse Doran & Le', 24/02/98

⁴⁴ The farmers sell their land to enjoy the city

⁴⁵ Per discussion with Mrs. Janet King, Senior Legal Instructor of the Community Legal Education Center, 26/02/98

⁴⁶ In order to give a rough estimate of the size of the land market, following extrapolation gymnastics may help. The total amount of villages in rural areas can be estimated at 11,303 (13,408 Cambodian villages x 84.5% ratio rural/total population; census '98). Applying the ratio 'village sold land/total sample of villages' of 44.3% to the 11,303 villages, gives 5,012 villages nationwide that sold land. Given the average of 163 HH/village, 7.86% of households that sold land in the 'land selling villages' represents 13 HH/village. Over 5,012 villages, this cuts out 65,156 HH that sold land. If each of them sold only ½ ha, the size of the land market since 1993 would amount to about 32,500 ha, which can safely be considered the lower end of the estimate. This figure would signify that about 1.5% of all cropped land has changed hands in the period under consideration

The existing land law hinges on a consistent 'cadastre' that, in its current form, looks increasingly like a losing proposition. Proposals for collective registration and recordation on the commune level (such as the PRCA) to provide the basic framework, have so far remained sidelined within the Council of Ministers. A case could be made in favor of a legal framework for leasehold rather than ownership. In the words of Tickner, *"there would appear to have been too much emphasis on the ownership aspects of land, rather than on how to make what cultivable land there is available to a large number of people in an area... In this context improved legal arrangements for renting land would probably help optimize land use initially"* (Tickner, 1996:54). Yet it is hard to see how an improved legal framework for leasehold and sharecropping built on a foundation of fragile and ambiguous land rights, will not itself be the subject of continuous disputes.

5.3.2.2 Patterns of growing land concentration

The existing legislation with regard to land, does not manage to foster the promotion of an adequate framework for the evolving situation, brought about by market reforms and changes in wealth and population pressure. The result is a growing land concentration, even in areas where land pressure is not (yet) an important feature. The phenomenon is, of course, most remarkable in areas of rapid development, such as the provinces of Kompong Cham (high demand for industrial use), Kandal (periphery of Phnom Penh), and Kampong Som (high tourism potential with the beaches around Siha-noukville). Land concentration happens basically in two ways: through the mechanism of the land market by which farming units in a given alienable domain change in number and size, and by illegal land grabbing by which land that does not belong to the alienable domain is encroached upon. It is clear that the first mechanism is mainly functional in highly active land markets where possibilities for expansion have been exhausted. The second mechanism is operative in areas where there is still 'unoccupied' land.

Distress sales

Where the land market is very active, the complementary issues of a slight asset base and high indebtedness intertwine to push the market in the direction of a greater concentration. Poorer rural households have a very slight asset base, compared to richer urban households, as may be reflected in Table 15. In the absence of firm data such as the number of draft animals/HH per quintile or decile, the housing space available per capita may serve as a good proxy to indicate the solidity of the asset base. Although some cultural elements may be at work in the demarcation between urban and rural housing habits, a general trend is clearly discernible in the spread between richest and poorest households of 1.67 and 2.11 respectively for rural and urban areas.

Table 15: Housing space/capita, By expenditure quintile/capita and rural/urban residence, 1996

Expenditure quintile/capita	Space per capita (m ²)	
	Rural	Urban
Poorest	4.83	5.48
Second	5.23	6.87
Third	5.77	7.89
Fourth	6.91	9.82
Richest	8.08	11.59
Total	6.17	8.33

Source: Human Development Report, 1997

What are the elements that erode the asset bases of rural households, and drive them into indebtedness? To a certain extent, the ecological pressure and its concomitant lack of supporting policies, and the extremely low budget outlays for human development seem to be pertinent. In first instance, there is the 'generalised' shock brought about by the ecological factor. Cambodia had three successive years of floods (in 1992, 1993, and 1994) and one year of drought (1996). Whereas households may be able to cope with a bad harvest by incurring debts, successive years of bad harvests may raise indebtedness to such levels that the distress sale of land remains the only option. In a way, it is quite probable that these ecological vagaries are a negative externality of the development of cottage industries (brick-making and fish-smoking) and of continuing land clearing. These activities entail the clearing of inundated forests around the Tonle Sap Lake, where *"deforestation has reportedly caused major changes in hydrologic conditions in this lake and its associated river systems"* (Min. Environment, 1998:4). A second major element – the 'individual' shock – is the incidence of illness or accident in the household, which often turns into a major cause of asset depletion, just as theft or loss through insecurity. As Sophal et al state: *"illness often acts as a catalyst, depriving households of the productive assets and driving them into poverty"* (1998:65). The Cambodia Socio-Economic Survey 1997 reveals that households in the rural sector spent 28,585 Riels/HH on average for out patient treatment and hospitalisation during a reference period of four weeks (1997:19). This should be considered against the fact that the average monthly household consumption in rural areas for the same year amounted to 220,037 Riels (ibid:39). These are nothing less than staggering figures, and the underlying reason is to be found on macro-level, where in 1997 public sector health spending in Cambodia accounted for only 0.7% of GDP against 6.5% of GDP for private health expenditures (Kato, 1998:26)⁴⁷. The principal result is then simply to perpetuate poverty from one generation to the next. With this background, and given that Cambodia has the most serious HIV epidemic in Asia, the economic and human implications of HIV/AIDS in the near future could be staggering. In the framework of asset depletion and distress sales of land, it is most relevant to note that *"it is likely that HIV/AIDS is a disease of the poor and the illiterate"* (UNDP, 1997:51)⁴⁸.

The general response to seasonal cycles of income – which appears to be to borrow food or money from relatives or friends rather than to dispose of assets – may vary considerably (Tickner, 1996:28). A number of studies however (CDRI, Mekong River Commission, Be et al) converge on some fundamentals. The most comprehensive one, covering 5117 sample households, finds that 47.3% of all households have standing cash debts and 13% have rice debts, ranging from 331,000 riel to 1,252,000 riel and from 177 kg of rice to 643 kg per household⁴⁹. Buying rice and medical treatment account for 54% of the cases of borrowing money (Ahmed et al, 1998:53-56). Another study (CDRI;

⁴⁷ Although not specifically named as a catalyst in asset-depletion, the same pattern applies to education. Of nine countries in the Asia-Pacific Region - Cambodia appears to have the lowest share of government contribution (25%) and the highest share of household contribution (75%) to the recurrent costs of public primary education (UNDP, 1997:45). In other countries, the share of households in total costs ranges from 10% to 35%. In 1997, the budget allocation amounted to a mere 9 \$/pupil, which does not even allow for maintenance of the educational system built up in the 1980s (Sophal et al, 1998:63)

⁴⁸ HIV/AIDS is a case where human development and economic development considerations converge almost perfectly. At current infection rates, from one half to one million Cambodians will be infected by the year 2006; 40% of these infections occur in individuals aged 20-29 years old. The disease has a very real economic cost, not only in terms of direct medical costs, but also indirectly: the value of output lost by society because of the premature mortality of AIDS victims.

⁴⁹ To put this in perspective, remember that an average household of 5.2 members would require about 950 kg/year. These figures therefore convey a shortfall of 20% to 70% in subsistence rice needs

1997:23), covering 1396 persons in a sample of households selected from 3 different villages and provinces, reports significant losses arising from crop damage in all three villages, varying from about 100 to about 300 US\$ on average (260,000 to 900,000 riel)⁵⁰. These losses were concentrated in time, amplifying the burden on household resources. In the three villages, from 65 to 90% of households reported a medical emergency in the last 3 years. Also death of animals was found to be a significant obstacle in the CDRI survey, and in one sample village 65% of households reported animal losses over a three-year period. In terms of coping mechanism, the poor and extreme poor are more likely to cut back on consumption, get into high-cost debt, sell land or migrate temporarily. The rich will rely more on savings, or sell gold, jewellery and animals. Looking into credit market participation, the study recounts that from 58% to 83% of households reported outstanding credit, with average amounts ranging from 555,000 to 650,000 riels (from 200\$ to 250\$). An interesting element in their results in terms of the relation between interest rates and distress sales, is that the poorer households have to take recourse to expensive credit, usually above 100% per annum, whereas the well-off and rich pay 20 to 60% per annum⁵¹.

Although there are no detailed data available for the extent of distress sales of land or other assets (draught animals...)⁵², it is not hard to see that households – once indebted and with income sources drying up because of personal or ecological calamities – have no other recourse available. As the study reports, during a period of 5 years, between 17% and 30% of sample households bought land while about 10% sold land, stating that *“much of the purchases were by the rich and well-off while sales were made by the poor and extreme poor”* (CDRI, 1997:22). In an earlier mentioned case study, Be et al. report three reasons that prompt farmers to sell their land: to repay debts, to move from the village (to another village or to town), and to exchange land (Be et al., 1993:10). Two of the three motives can be considered as risky coping strategies, which include indebtedness to non-family members (*kçhai bul*), cyclical or permanent out-migration from home districts, sole reliance on income derived from exploiting forest resources, and working in areas affected by land mines (WFP, 1997:14). Just how risky the latter is may be borne out by statistics that show the total reported land mine casualties from 1979 to 1996 to be 37,860, with 1996 being the year with the highest incidence after 1979 (Mine Incident Database, 1998). Indeed, *“poverty leaves no alternative to cut bamboo, collect firewood, chase frogs or gather lotus flowers”* (Ovesen, 1996:31).

Landlessness

FAO reports that the phenomenon is making headway, and places it strongly in the spiral of indebtedness: loan, indebtedness, second loan, distress sale (FAO, 1994:17). Detailed data on the extent of landlessness in general are not available. Some partial indications however allow to get an idea of its extent in relation to income distribution and land pressure (average rice land size). The land-

⁵⁰ It must be said that findings on this issue are not always very consistent; Prins calculates a cash profit per hectare of lowland rainfed rice (the dominant crop) of 190\$ (Prins, 1996:appendix 2). It is hard to see how a farmer can report losses of \$100, when earning 190\$, unless the losses reported by the case studies are not on an annual basis.

⁵¹ One NGO in Battambang province ('Aphivat Strey') reports that for a loan of 1,000 riel (0.4 \$), the borrower will be required to transplant the lender's field without wage. For a loan of 10,000 riel, repayment will consist of 100 kg of rice

⁵² Arguably the sale of children into prostitution ought to be understood within this framework

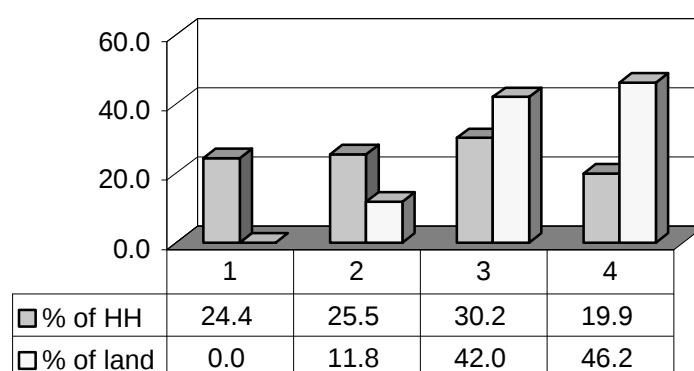
ownership distribution data from the CDRI-study (op.cit., 1997) in terms of decile shares reveal the top 10% of households to account for 34% of the land, while the bottom 40% owned only 9% of the land. Although the data from the survey of Ahmed et al. (op.cit.,1998:table3.16) do not give information on the distribution of land by income, they do allow to assess the concentration of land on the basis of the exercise elaborated in Table 16. To enable an approximation of land concentration based on data covering 4,962 households in 8 different provinces, one specific value per different land size category was used: 0.25 ha for category 2, 0.75 ha for category 3, and 1.25 ha for category 4.

Table 16: Land concentration: average for 8 provinces, 1995-96

	Land size	No. of households	Proportion	Size of agricultural land (ha)		Proportion
Category 1	Landless	1,210	24.4	1,210 x 0	0	0
Category 2	0<land<0.5 ha	1,266	25.5	1,266 x 0.25	316.50	11.8
Category 3	0.5<land<1ha	1,497	30.2	1,497 x 0.75	1,122.75	42.0
Category 4	Land >1 ha	989	19.9	989 x 1.25	1,236.25	46.2
Total		4,962	100.0		2,675.50	100.0

Source: adapted from Ahmed et.al, 1998:table3.16

Figure 10: Land concentration in 8 provinces



Although it speaks for itself that the above results are anything but conclusive, the approximation yields a result that seems to confirm the picture conveyed by the CDRI-study: the poorest half of the rural population accounts for about 10% of the cultivable land. In addition, whereas the survey conducted by Shams et al. (1994) estimated that between 2.5 and 9.1% of households in the villages studied were landless, Ahmed et al. put the proportion of landless households in the 8 provinces surveyed as high as 25%. This discrepancy can be explained when considering figure 11. This figure relates the data on rice land/HH per province presented earlier, with the data on landlessness calculated by Ahmed et al. for a total of 3,225 non-fishing households in 8 provinces. As can be expected,

there is clearly an inverse relation between the average amount of rice land/HH for a province and the proportion of landless households for that province. The trendline in the scattergram below shows how a 1 ha increase in subsistence rice land/HH (from 0.4 to 1.4 ha) decreases the incidence of landless households in a province from 35% to 10%. The effect is to put Pursat in

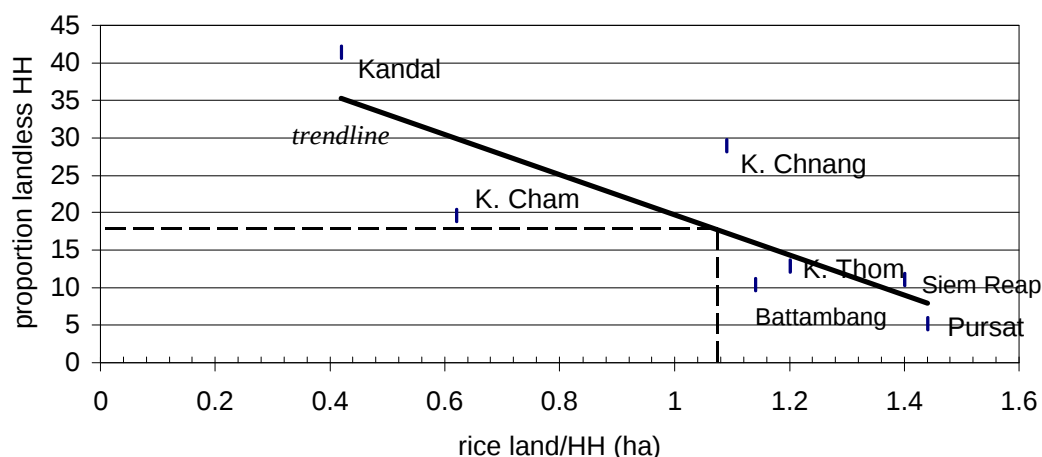
Table 17: landlessness, by province

Province	rice land/HH ha/ ^a	landless %/ ^b
Battambang	1,14	10,4
K. Cham	0,62	19,6
K. Chnang	1,09	29,0
K. Thom	1,20	12,9
Kandal	0,42	41,4
Pursat	1,44	5,2
Siem Reap	1,40	11,1

Source: a/Annex ..., b/Ahmed et.al, 1998:38

the bottom right hand corner, that is: highest average rice land/HH of all 8 provinces, and lowest proportion of landless households⁵³. Projecting the calculated average rice land/HH of 1.08 ha (cf. annex 4) on the trendline of figure 11, would indeed approach the estimated 20 % overall proportion of landless households.

Figure 11: Provincial distribution of landlessness by average size of rice land/HH



Source: table 17

There are a number of indications to consider that the majority of people with no assignment of agricultural land are those that missed the initial distribution of 1989 and therefore never received land. The earlier mentioned WFP survey found 48% of all surveyed villages to have families that were never granted land rights, with a mean number of families per village of 4%. In essence this group consists of either the newly settled (i.e. returnees and demobilized soldiers), or else those who got married and separated from their parents after 1989 but did not get land from their parents (Kusakabe et al., 1994:7). At least a million people were put at a disadvantage by the private ownership rights granted in 1989: the refugees in third countries and Thailand, the border people living along the Cambodian-Thai border (Khmer Rouge areas), the internally displaced people, and those forcibly relocated to strategic hamlets inside Cambodia (Greve, 1993:50)⁵⁴. Of the 362,209 returnees counted as of 01/06/1993, 58% was repatriated to the provinces of Battambang and Banteay Meanchey (Robinson, 1994/1:28). A study on resettlement of returnees in Battambang province shows that the single greatest contrast between returnees and locals is ownership of or access to farmland. Of all local families, 79% said they had access to farmland compared to a mere 15% of returnee families (Robinson, 1994/2:33). Although some were promised 2 ha, at best they received ½ ha to which they had trouble hanging on to⁵⁵. A parallel can be drawn with other – very distant, different and yet so similar – situa-

⁵³ The special position of Kampong Cham re. landlessness is related to the fact that the large majority of farmer households is near-landless rather than landless: 44.7% of non-fishing households owns between 0 and 0.5 ha

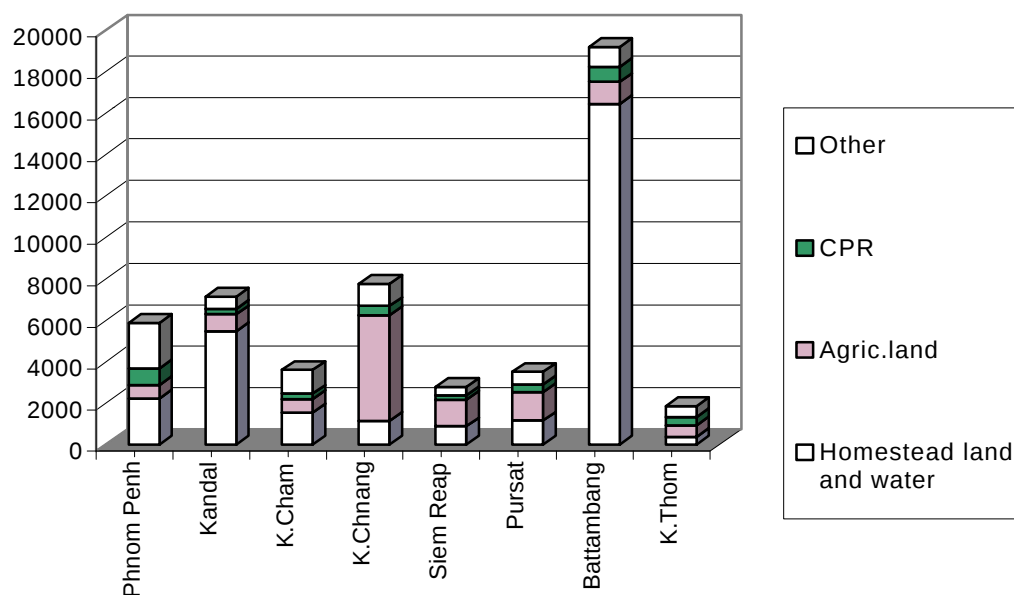
⁵⁴ In December 1992, the Red Cross counted a total of 158,319 internally displaced persons in Cambodia (Robinson, 1994:54)

⁵⁵ Returnees could choose between several options for their repatriation, a process which started on 30/03/1992. Option A centred on land, with an assistance packet including up to 2 ha of agricultural land per family. A few months later, UNHCR's land consultants concluded that the majority of option A returnees in Battambang had no

tions. Writing on land access in Mozambique, Boucher et al. assert that the weakest, most needy segment of the population – the war refugees - is victimized, given that they are the ones most likely to receive very fragile rights to land. “*The local government may grant refugees land rights in overpopulated, reserved, or disputed areas – areas that will most likely be reassigned or reclaimed*” (Boucher et al., 1995).

Is there a straightforward relation between income and access to land? As has previously been suggested, there is certainly no parity; the association between income, poverty, malnutrition, and land access is very complex. This suggests that the provinces with severe land pressure need not necessarily be the poorest (as can also be deduced from figure 8), nor that landless households ought per definition to be the most destitute. The reason is once again the intricate farming system, which Nesbitt refers to as the rice/animal/fish interaction (1996:69). The importance of homestead production and access to common property resources cannot be overestimated. This is clear from looking at figure 12, which is based on field-level data from Ahmed et.al on the 8 provinces surveyed in his study. In short, landlessness is not necessarily a reliable measure of calamity inasmuch as open access to the benefits of common property resources is not restricted for the poorest households. All these different aspects of the rural flow of resources have been culled together in the flow-chart represented in figure 13.

Figure 12: Average gross annual income (000 Riel) per HH by source, '95-96

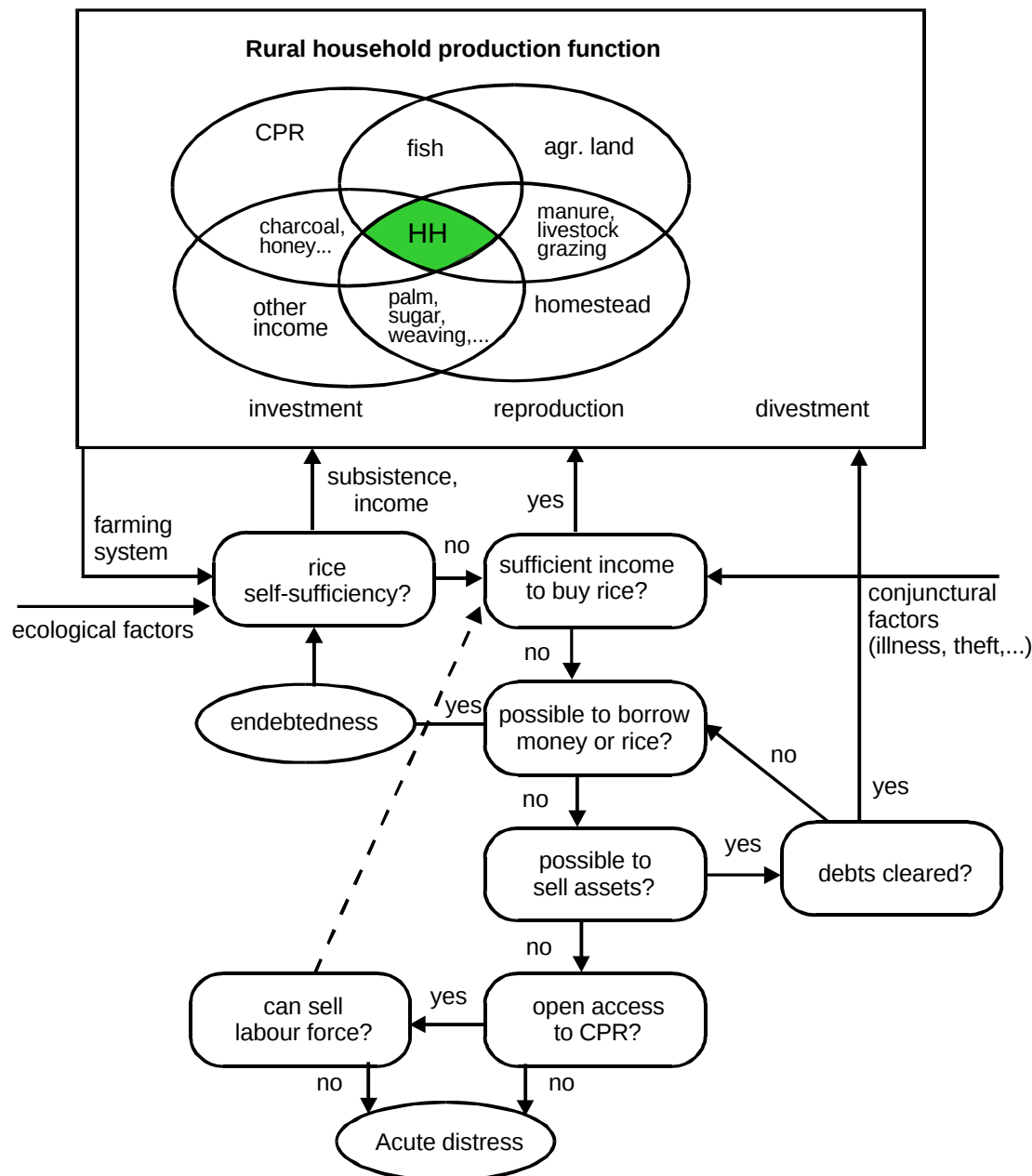


Source: calculations based on Ahmed et.al, 1996:44

The extraordinary large income from homestead production for Battambang and Kandal province is due to the production of fruits.

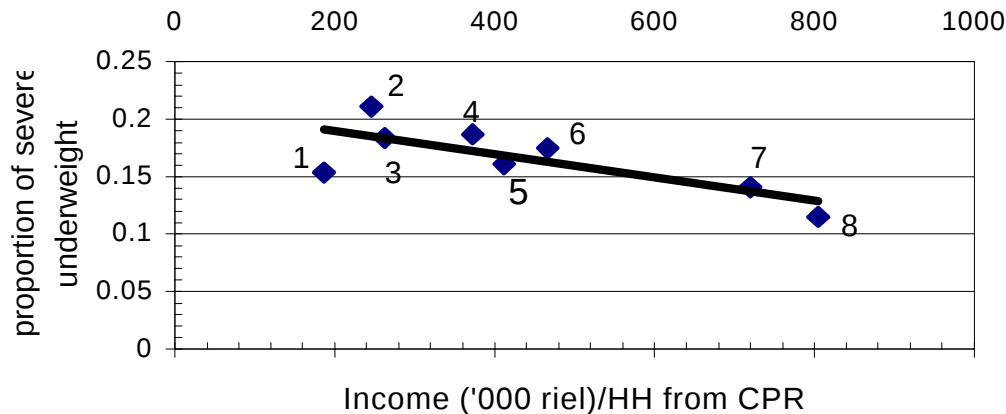
land or were living very far away from it. “Even in the best cases, returnees have received only half a hectare of

Figure 13: Households (HH) and the rural resource flow



The real hazard for the majority of rural households (esp. the fated 50% that hardly owns 10% of the land as seen previously) may therefore be more a combination of increasing land pressure and the ongoing conversion of common land/water into crop land for private use. In this light it is important to note the effects of land speculation, as this one factor combines an increasingly active land market with land use conversion. It is certain that land speculation is a reality in Cambodia, not only in the previously mentioned peri-urban zone of Phnom Penh, the zone with high tourist potential around Siem Reap and Sihanoukville, and the potential industrial area of Kompong Cham. In addition, speculation will shape up in areas along the proposed routes of the planned mega-projects to build a highway from Ho Chi Minh City to Bangkok, and from Sihanoukville to southern China, as rural land becomes more valuable and the stakes of ownership higher⁵⁶.

agricultural land which is on loan from the Province for one year"(Robinson, 1994/1:25)

Figure 14: Effect of CPR income on severe underweight

1: Siem Reap, 2: Kandal, 3: K.Cham, 4: Pursat, 5: K.Thom, 6: K.Chnang, 7: Battambang, 8: Phnom Penh
 Source: based on Ahmed et.al, 1998:44/CHDR, 1997:table IV.2

5.3.3 The expropriation of public land

5.3.3.1 The importance of Common Property Resources

According to some, the central problem of land tenure is situated in the managing of state property (public land), or rather in the substitution of corruption for its management. In a sense this is true, since accumulation of land in the hands of a few private individuals proceeds much faster via the expropriation of public land than via transactions on the land market.

Earlier the paper pointed out the importance of CPR (common property resources) – inundated forests, flooded ricelands, riverbanks... - for the subsistence of rural households. As Ahmed et.al assert: *“households with open access to CPR reported that more than 80% of the households within their commune also depend on the products/benefits derived from these resources”*. Relating the estimates of income derived from access to CPR in 8 provinces (Ahmed et.al, 1998:44) with data on the incidence of severely underweight children (CHDR, 1997), complements the earlier similar exercise which used the provincial estimates of rice land/HH. Although the data are too limited to be conclusive, the trendline that could be established conveys a very clear picture: the higher the benefits derived from CPR access, the lower the incidence of malnutrition. This tends to confirm the picture that CPR products are an essential protein-rich complement to rural diets (cf. annex 6 on the rice-fish interaction). With this background, the increasing unavailability of these resources will affect the livelihood of households with limited options. At the micro-level for example, an NGO ('Aphivat Strey') active in 3 villages in Ek Phnom district (Battambang) reports that about 200 of the 978 households in their intervention area are exclusively dependent for a livelihood on the exchange of labour for food and the extraction of CPR products.

Yet, declining access is exactly what seems to be happening. In the eight survey-provinces, 95.3% of households reported a decreasing trend in the availability of products and benefits from inundated

⁵⁶ Per discussion with Mrs. Janet King, 26/02/98

forests. In the same vein, 83.2% and 81.9% resp. reported a similar trend for products derived from rivers and lakes, and from the banks/beds of these rivers and lakes (Ahmed et.al, 1998:132). The amount of fresh water fish caught from common rivers and lakes for example, decreased drastically during the period 1993-1997, from 67,000 t. to a mere 3,500 t. (Sopha et.al, 1998:67). In this sense, enormous pressure is put on the production of rice, and a series of bad harvests has far more dramatic consequences than if the rice/livestock/fish interaction were able to play itself out via a mix of private land possession and open access to common property. In areas where land is not fully occupied, there are two mechanisms at work that enhance an increasing concentration of land ownership, notably the expropriation of public land of which the status is unclear, and the seizure of clearly demarcated public land and forest areas. In the first instance, expropriation relates to land affected by a legal provision that dates back to 1980, to the status of demined land, and most importantly to the informal parcelling up of areas that traditionally have been under a regime of open access. The second instance involves the illegal reclamation of land that forms part of the protected areas in Cambodia (wildlife sanctuaries, national parks, and protected landscapes).

5.3.3.2 The expropriation of land with unclear status

The status of reserved and demined land

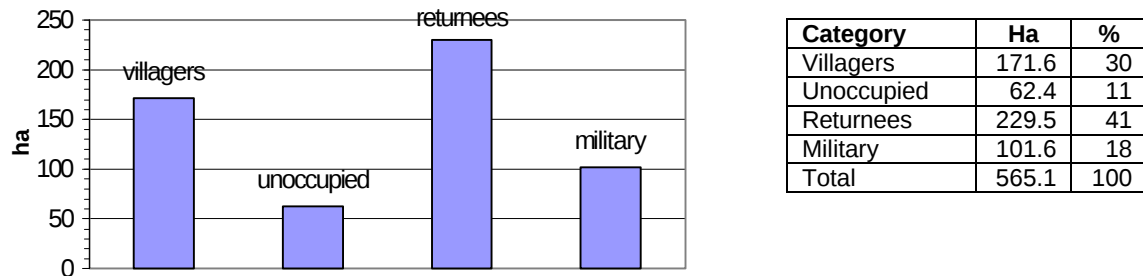
A decree of 1989 established that 3 to 5 ha of land was to be set aside in each village for ulterior needs, such as newcomers, poor families... Although a seemingly minor issue, if looked at from a national point of view this land would represent a sizeable amount. Given that there are 13,408 villages in Cambodia (census, 1998), this decree affects an area of 40,000 to 67,000 ha (average 53,500 ha). To put this into a crude perspective, assuming that landless rural households represent 20% of all rural households, an additional area of 53,500 ha could have the potential to reduce the incidence of landlessness by 14.5%⁵⁷. In the majority of cases however, these lands have not been distributed to demobilised soldiers or returnee families, but to family-members of the local authorities (FAO, 1994:11). In this, the transitional period following the signing of the Paris Peace Accord in 1991 up to the general elections in 1993 was a particularly bad time, when *'state officials took advantage of the confusion and sold almost all properties, including land'* (ANGOC, 1998). Or, if they ever were distributed as originally intended, have since been recuperated by the latter. *"Major UNHCR efforts to provide returnees with land titles had not always been respected. Once the UNHCR office phased out, much of this land was taken over by others, often with the alleged complicity of the local authorities"* (UNHCR eval/03/95, 1998:§76).

The land-use problems currently posed by de-mined land are relatively modest, but are bound to increase as de-mining progresses in the future. By half 1998, CMAC (Cambodian Mine Action Centre) had cleared 5,500 ha of land. So far, there have been quite some land management problems in these areas, *"especially when CMAC is operating in remote areas which have been abandoned by the population for a long time or which have been under the control of the armed forces"* (CMAC, 1998:5). An assessment of the use of demined land conducted by Norwegian People's Aid (NPA) in 10 of the

⁵⁷ [(total population – urban population) / average size of HH] x 0.2 = landless rural households (LRH) ; (53,500/LRH) x 100 = % of landlessness alleviated by area at 1ha/HH; LRH = (9,632,306/5.2) x 0.2 = 370,473 ; (53,500/370,473) x 100 = 14.5%

34 main minefields in O Chrov and Svaay Cheek districts (B. Meanchey) concluded that none of the occupied demined land has any official permission paper. Yet, none of this land – save for some minor exceptions – is free of ownership. On the basis of the survey report, table and figure 15 could be drafted.

Figure 15: Use of demined land in O Chrov and Svaay Cheek districts



Source: based on an assessment by NPA, 1996; the category 'returnees' includes author's estimate of the size of site 'Taa Samon minefield, Rolous commune, Svaay Cheek district' on the basis of survey description of land use.

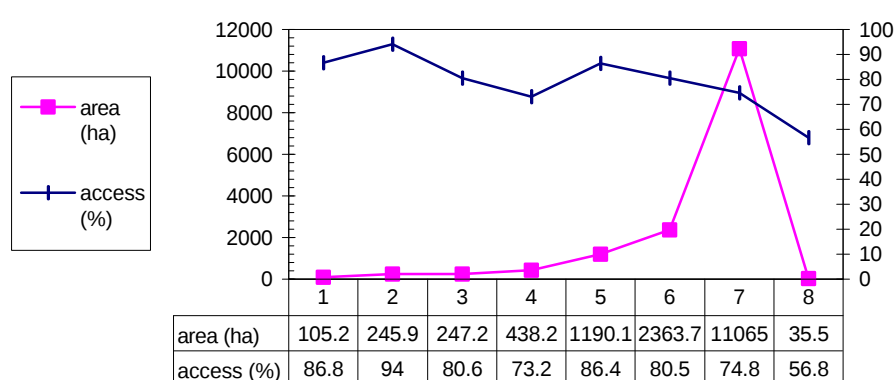
Although the sample used is not representative, the table may well illustrate actual land use of demined areas in the sense that the survey was conducted over an area that: 1. represents 10% of the size of all demined land, 2. forms part of the concentration area for CMAC's demining effort. Most notable in the table is the de facto occupation of nearly 1/5th of demined land by the military. As to the so-called unoccupied area, the survey team reported that *'the piece we saw is approx. 90,000 m², has been fenced, but no activity has been done on the land. No information about the rest of this demined land'* (Norwegian people's Aid, 1996:2). How big the issue of the status of demined land will become in the future, is clearly determined by the range of cultivable land within the total confine of mine-affected land, the latter estimated at approximately 300,000 ha. Part of the mine-affected areas, even when demined, would be considered as common property resources rather than privately alienable land. Assuming the ratio cultivable land/overall land for the whole of Cambodia (14%) to be applicable to the surface of the entire mine-affected area, the cultivable area to be released by demining efforts would be around 42,000 ha. Given the sheer extent of mine-affected land, it seems probable that the cultivable area will be concentrated on first, rather than forested areas for example. This would mean that the discussion on the affectation of demined land would not be gradual and extremely drawn-out, but – at the current rate of demining - would tend to balloon in the next decade. This is especially so considering the forecast increase of the population by 50% within the same timeframe.

Inundated and upland forests

Nevertheless, although the issues of village land with reserve status and demined land are significant, their importance is dwarfed by what could be called the 'closing of the commons': the privatisation of common property resources held under a regime of open access. It concerns here in first instance these resources that – in association with privately possessed rice-, *chamcar*- and homestead land (cf. figure μ...) – combine to determine the household income frontier realised through agricultural and

associated activities and cottage industries. In order of importance these are inundated forests, flooded ricefields (privately owned but treated as common property for fishing) rivers and lakes, the banks of rivers and lakes, and irrigation canals and dikes. Of these, inundated forests are by far the most significant in terms of access and area. In the survey conducted by Ahmed in 8 provinces with important freshwater-fishing, inundated forests are used by 81% of households as a source of firewood, grazing land, and fishing ground (Ahmed et.al, 1998:41). To give an idea of their amplitude, in the 1,433,455 ha occupied by the diverse ecosystems in the Tonle Sap area in 1989, 270,607 ha (18.9%) are occupied by open water, 248,521 ha (18.9%) by paddy fields, and 549,922 ha (38.4%) by annually flooding forest (Min. of Environment, 1998:77). Yet even the last figure – equal to a quarter of all cultivable land in Cambodia - is a reduction from 1 million ha in the 1960s (idem, 18).

Figure 16: Inundated forests: average area/commune and access, by province

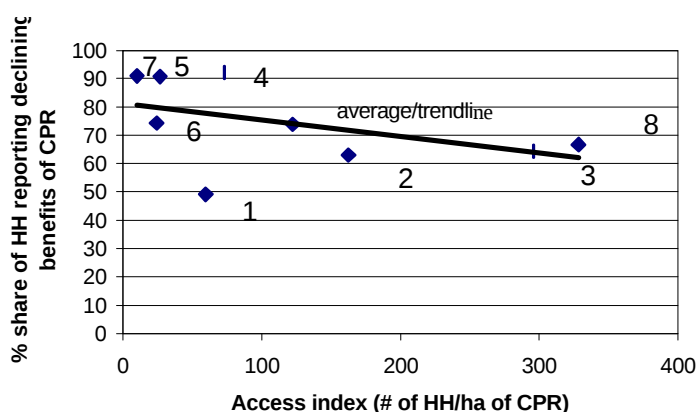


1. Phnom Penh, 2. Kandal, 3. K.Cham, 4. K.Chnang, 5. Siem Reap, 6. Pursat, 7. Battambang, 8. K.Thom;
Source: based on data-ranges from Ahmed et.al, 1998: 40-41

The figures produced by the survey of Ahmed et.al show very divergent figures for access to inundated forests (in 1995-96). Contrary to intuition, there seems to be no inverse relation between land pressure (the average area/commune of accessible inundated forest, by province) and access

(households that report access to this area, by province). This is indicated by

Figure 17: Declining benefits from CPR by household accessing CPR/ha



1. Phnom Penh, 2. Kandal, 3. K.Cham, 4. K.Chnang, 5. Siem Reap, 6. Pursat, 7. Battambang, 8. K.Thom

figure 16, especially by looking at the values for Kandal and Battambang. Yet, if the data are reconsidered from the opposite angle, it seems that the higher the number of households reporting access per ha of CPR in a commune, the lower the percentage of households reporting a declining trend of availability of products and benefits from CPR. In figure 17, these reports for a declining trend of availability (per province, Ahmed et al.,

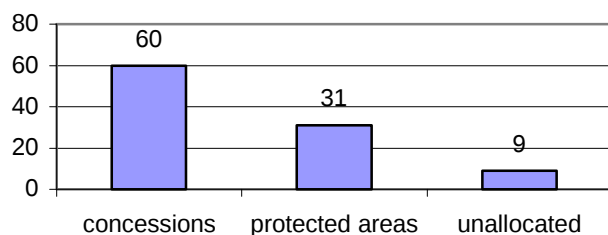
1998:132) have been associated to estimates of the number of households reporting access per ha of CPR in a commune (for the calculations, refer to annex 5).

Probable explanation for this divergence might be different patterns of 'foreclosure' and different local processes of collective choice and public policy. Whereas the reported trend of benefits from CPR is considered to be declining everywhere (average 73.99%), in highly populous communities this may be related more to overexploitation and population pressure. In communities relatively well-endowed with common land/water, conversion into crop land for private use may be more pertinent, and as a consequence the pressure on the common land/water may increase much faster. Since rising pressure on resources may be rather new for some of these areas, communities may not have learnt how to deal with it in a socially efficient way, as others would have during the period of semi-collective management under the '*krom samaki*'. In addition, it can be assumed that resistance to conversion and privatisation of common benefits – in essence creating further pressure on privately owned rice-land - increases dramatically as households hold on to a very basic $\frac{1}{2}$ ha or less of cropland, as is the case in Kampong Cham or Kandal. From the figure, the highly skewed relation for Battambang between household access/ha CPR (9.82) and the 91.1% of households reporting declining benefits from CPR, is apparent. The above assumptions seem to be reflected there at micro-level. The earlier mentioned local NGO 'Aphivat Strey' reports that freshwater bodies in its area of intervention are leased as fishing lots by middlemen that harvest and auction fish, water beetles, water convolvulus, and lily, and have these premises guarded by gunmen. In addition, illegal fishing techniques (electrocution, dry-pumping...) have contributed to a steep fall in the size of catches. Given the good prospects (soils, close to the Thai border...) for the cultivation of fragrant rice varieties (Jasmine, Somali), large areas of flooding forest are being cut. As for Pursat, Shams et.al (1993) report that the edges of the forest have been informally parcelled up amongst villagers, so that a newcomer is prevented from clearing.

Although the issue of inundated forests affects the very core of Cambodia's food security, and with it a large group of villagers living in the concerned areas, the controversy surrounding Cambodia's CPR-base is much broader. Perhaps more widely known is the de facto privatisation of Cambodia's extensive upland forests, and the resulting loss of forest cover. Figure μ (adaptation of Butterfield, 1997:3) provides an image of the percentage share of forest land that remains 'unallocated'.

Using Satellite Imagery, Thung (1994) estimated Cambodia's forest cover (non-inundated, non-mangrove) – comprising evergreen, deciduous, mixed, and secondary forest - at 10,495,600 ha, or 57.9% of the country's surface area. Much of this forested land is to be found in the provinces of Ratanakiri, Mondulakiri, Stung Treng, Kratie, and Koh Kong. Nowhere is the dilemma between the traditional rights to common property resources and 'modern' exclusive rights as clear-cut as with the hill-tribe populations of Ratanakiri and Mondulakiri. The condition of the five-year continued cultivation required for a land claim, largely bars them from lodging a justifiable petition for the land due to their use of swidden agriculture. The officials claim that unless they adopt a settled method of agriculture, they have no claim to the land. In addition, these people are often ignorant of the official land claim procedure (Russell, 1996:4). In Ratanakiri province for example, to date a mere fraction of the population received land certificates. Of the 1,301 titles issued in the province by March 1997, the majority went to lowland Khmer and ethnic Lao residents. As Colm states, "*the remoteness of the ethnic minority*

communities from administrative centers, coupled with the complexities of existing laws and procedures, effectively bars many highlanders from obtaining land title"⁵⁸.



The collective use of these resources does not restrain their allocation. All of Ratanakiri's land area - except for the national park and wildlife sanctuary - has been approved by Cambodia's former two prime ministers for a 30-year concession by an Indonesian company. Meanwhile, provincial

authorities are proceeding with their own development plans (Colm, 1997:34). Between provincial and central government concessions and 'set asides' (parkland), more than 130% of the provincial land - 30% more than actually exists - has been pledged (either granted as concessions or placed in protected areas) (Butterfield, 1997). As the Ministry of Environment states of the 11 concessions covering 2.2 million ha that were established before 1994: *"these concessions have been awarded to large commercial interests through a process which is not transparent and has involved only limited surveys of the concession areas"* (1998:6). Notwithstanding the issuing of large and small concessions, land speculation is continuing. Lowland Khmer migrate to the province and obtain titles to parcels of land near market centres such as Banlung and Bokeo. Some of this land is then cultivated, while other plots are left unplanted. In addition, groups of business people form associations to buy up hundreds of hectares of paddy land for agribusiness, as in Lumphat District. All this does not take into consideration the occupancy rights of the 72,000 tribal people who live in the province and earn their living by farming, hunting, and gathering. In this light, a 1997 study analysed the benefits of alternative land use per hectare of forest in Ratanakiri province, and concluded that, over a 90 year time period and at a 6% discount rate, NTFP (non-timber forest production) has an estimated value of US\$3,922/ha, or 43.58\$/ha/year. If the forest were to be harvested unsustainably for timber, the value would be US\$1,697/ha, without considering other environmental functions that would be lost from timber harvesting (watershed and biodiversity values) (Bann, 1997:84). The latter value may even be exaggerated, in the light of the likely drop in royalty rates – from 41\$ to 14\$ - per cubic meter harvested⁵⁹ (Min. Environment, 1998:6). At the currently practiced unsustainable harvesting intensity of 40 m³/ha, this would produce a one time income of 560\$ for the Cambodian state, with immediate and substantial negative externalities for the local communities.

3. The illegal reclamation of land

When it comes to fraudulent transactions, the scales do not stop at the non-transparent distribution of public land that is alienable under certain conditions (village reserved land), or the opaque awarding of forest or other concessions. There is the evident grabbing of land with a distinct public status. Local newspapers quite regularly carry stories of fraudulent transactions of land within National Parks, such as the claims that had been staked on land in Kirirom National Park (Kompong Speu province) by

⁵⁸ Since January 1995 all final approvals of titles can only be done by the Central Land Title Office in Phnom Penh, requiring provincial land title officials to make a planetrip for final authorization.

⁵⁹ Compared to about 74\$/m³ on the world market

more than 200 people, including the acting chief prosecutor of the Supreme Court (Cambodia Daily, 06/11/1997:8). Another example is the unauthorised sale of land in the Preah Sihanouk National Park, where 200 ha of the protected land has been sold by “*navy personnel working hand in glove with the local people to unsuspecting foreigners*”(Cambodia Times, 26/05/97:4). To top the list, a Cambodian entrepreneur who obtained a license to **rehabilitate** a 1500 ha tea plantation which is situated inside Kirirom National Park, sold many hectares of the Park for \$400-1500 each lot. In addition, he installed a sawmill in the Park without permission, and **destroyed** the tea-plantation (Rasmei Kampuchea, 19/11/97).

It would be easy to go on citing flagrant cases of encroachment and land grabbing. However, of all issues relating to land tenure, this rather sensational one is the better-known and to some extent best-documented by the media. The point of interest for this paper rather is to find out from here how the legal framework and the land market connect, when it comes to disputes arising out of land transactions or related to land tenure more in general. Recognising the unclarity of the law, it is often very difficult to establish the strength of competing claims to a given piece of land. In this sense, land disputes signify substantial transaction costs since limited state and local resources have to be channelled to institutional processing of these controversies.

5.3.4 Land disputes

“One morning in February, the business partners at a map publishing company on Street 57 were getting ready for their first clients of the day. But rather than customers, 40 district police armed with AK-47s showed up at the office and gave the business partners 10 minutes to start packing. This was the businessmen’s first and only eviction notice”(Cambodian Daily, 18/04/98:21). Not much seems to have changed between this event and the anterior remark that *“literally all Phnom Penh residents living in houses or on land without title deeds issued by the ‘proper authorities’ can wake up one day to be forcibly evicted from their home...”*(Bangkok Post, 29/11/92).

5.3.4.1 Settlement in and out of court

Are such incidents exceptions, or rather common fare in Cambodia? Since only a fraction of Cambodia’s real estate is mapped and secured by legal title, interested parties with money and power are able to manoeuvre their way through the government bureaucracy and take land. In general, a distinction would have to be made between cases that involve abuse of power, and the majority of civil cases that concern counterclaims between family members. The procedure for land dispute resolution is a many tiered process, with many disputes being settled out of court. The grievance procedure follows the hierarchical structure of village, commune, and district levels (Russell, 1996:5). If a compromise solution cannot be reached, the grievance may go through the judicial system, which is the final level of recourse. In effect, land disputes constitute over 50% of court cases at the provincial level, effectively clogging the judicial system.

According to Russell, *“the traditional methods of dispute resolution, outside the court, are reasonably effective and the courts themselves attach significant weight to those same traditional argu-*

ments”(Russell, 1996:10). In order to clarify the intricacies and processes of land disputes and convey the ‘*couleur locale*’ of land tenure issues, two cases are presented here as exemplars, since they give the history as well as resolution of long-drawn out disputes. Both are culled from Russell (1996:6-8).

Conflicting land claims Case 1: the division of former *Krom Samaki* land

In 1979 the authorities allocated rice fields to the *krom samaki*, which the group divided among the members. These farmed the land for 9 years, up to 1988, when the commune took control of the land for a period of one year. After this period, it was to be returned to the group members. However, rather than being returned to the original group, it was divided further and distributed to non-group members. One of the 1989 recipients of the land (call him San), who had land in another commune, put in a claim in 1990 over the portion of land which the original user (call him Seng) used from 1979 to 1988. San received a ‘title’ to the land from the district. Seng filed a complaint with the communal authorities re. San’s entitlement, but found no attention to his objection. The district offered Seng a compromise to which he agreed, which was to give him another piece of land. This land however, was not given. Seng finally takes San to the Provincial Court. Witnesses for Seng were members of his former solidarity group, who testified as to Seng’s association with the land. San relied on the decision from the district authorities and his ‘title’. The commune leader was summoned and confirmed Seng’s statements, saying that he did not return the land to Seng since he could not go against a district order. Based on the 1989 instruction # 3, Seng’s right to the land was reinstated. Upon San’s appeal to the Appeal Court, the decision of the Provincial Court was upheld. When the case finally went to the Supreme Court, it followed the decision of the Appeal Court.

Conflicting land claims Case 2: temporary possession by returnees

In 1979, ‘Sar’ returned to his village and occupied the house and land under dispute. Two weeks later, Chea (Sar’s nephew) and his 2 children returned to the village and asked permission to stay with Sar and to build a small house on the land for temporary accommodation. Sar and his family agreed. The crops on the land remained Sar’s property. In 1987, upon seeing the dire predicament of Chea, Sar agreed to let Chea plant some bananas. In 1989, when the authorities issued their call for land claims, both Sar and Chea lodged claims over the same parcel. Sar requested the village committee to mediate the dispute. Chea claimed he had a legitimate petition, since he did not ask for temporary residence. In 1993, Sar took the unresolved dispute to court, which heard evidence from neighbours, the village chief, and the commune committee. The land titles office investigated the length of occupation of both parties, what was planted on the property and by whom. Based on Sub-Decree 25 and the 1992 Land Law, both have equally legitimate claims to the land. Chea established his claim under ‘temporary possession’ rights outlined in the Land Law. As a consequence, rights to the land were to be apportioned on the basis of the quantity of land used by each party.

This legal plasticity in dealing with land disputes – which rule system to apply – may fulfil a very functional role in the process of transforming agrarian production relations. The reference to the weight of traditional arguments, even by the courts, indicates the importance of a continuous reinterpretation of traditions, in order to give legal status and social legitimacy to new social relations that emerge in the countryside. This is, as Russell pointed out, especially the case with decisions by village structures, which are accountable to their electorate. However, notwithstanding the auspicious role played by the courts in the two cases, there can be no denying that there is a serious problem with the formal judiciary system. First of all, those with extensive legal training suffered disproportionately under the Khmer Rouge. As an article in the New York Times recounts, “*when the UN helped to set up a democratic government in 1993, there were only about 5 lawyers left*”(NYT, 11/02/97). Secondly, until the proclamation of the new constitution in 1993, the judges have always been part and parcel of the state apparatus as presided over by the Communist party. The principle of an independent judiciary is therefore fairly new. Especially in view of the continuing domination of the administration in rural areas by the former unitary party, this may constitute a grave handicap. In its ‘*Cambodia Report on Human Rights Practices for 1996*’, the US State Department asserts that in practice, the government does not ensure

an independent judiciary nor due process. The courts are subject to influence by the executive, and there is widespread corruption among judges. Civilian courts are often unable to try members of the military forces, and must obtain Ministry of Justice permission to prosecute members of the civil service. Defendants are effectively denied the presumption of innocence, because they are expected to bribe the judge for a favourable verdict (US State Department, 1997:5). The least that can be said is that, under these circumstances, a fair verdict from the courts - based on evidence from all parties to a dispute – is not to be postulated, esp. where local or central government are a party to the problem.

These and related difficulties are the province of the Commission on Human Rights, which was created under the National Assembly in 1994. Land cases are the vast majority – about 85% - of all cases presented to the Commission⁶⁰. The majority of problems deal with cases either where people have been effectively living for a long time on land of which the status is unclear, or with cases of land-grabbing by the military. In the first case, it concerns mostly theoretically public land in areas where the land increases in value. In the second case, it concerns the garrisoning in insecure areas of military, who later claim right to the occupied land (cf. demined land), or cases where the military simply and blatantly take land. It is the task of this Commission to mediate between plaintiffs and the relevant provincial authorities or ministries, or to send it to court. This does not solve the problem of corruption in the courts; if a court has ruled on the case, the Commission will not touch it any more. For this reason, human rights organisations are becoming more attentive to land right violations where local authorities are involved, and that have been lodged as civil cases in the court system.⁶¹

5.3.4.2 Effects on vulnerable groups

The losers of the current land concentration are most likely to be those rural poor with the most fragile land rights and asset base, and therefore the most tenuous hold on subsistence. These are households led by single women, or by disabled or elderly heads, resettled households, and – as a special case – the so-called hill-tribes, which this paper considered above.

Gender does not seem to be a factor in the determination of poverty-patterns, as *“it does not appear to be the case that female-headed households are generally more vulnerable to poverty than those headed by males”* (World Bank, 1997:5)⁶². The incidence of poverty averages only 35% in female-headed households, compared to 40% in male-headed households, making gender and poverty patterns by household headship similar to those observed in other East Asian countries. Counting of land plots registered in March 1996 by an externally supported project to the LTD, showed almost equal figures for registration under the name of a single man, woman or both (Meijers, 1996:3). Nevertheless, previous figures indicated a persistent bias in the quantity of land per member of the family available to a women-led household. In addition, land disputes involving households headed by a single

⁶⁰ Per discussion with Mr. David Ashley, UNDP Advisor to the Commission, 27/06/97

⁶¹ One of these organisations is 'Legal Aid of Cambodia', that trains and provides legal defenders primarily for criminal cases, but increasingly also for civil cases. From its 'statistic report of closed cases for 1997' can be deduced that – of the 653 cases handled in total – 45 were related to land disputes, over the whole gamut from municipal over provincial court up to the court of appeals and even the supreme court (per discussion with Lean Chinda and Chea Veasna, lawyers of 'Legal Aid of Cambodia' on 27/02/98)

female should be considered against the background of Cambodian cultural considerations of 'widowhood', who are in a way 'degendered' and made socially invisible⁶³. As Ovesen put it: *"their houses and gardens were located in the periphery of the village, where they lived more or less as social outcasts (...) with not even a minimum of participation in public life and decision-making"* (1996:61). In those cases where vulnerability is multi-faceted – as in a combination of returnee status with other aspects of vulnerability - access to land may be even more tenuous. A case study of returnees in 1994 in 4 villages in Battambang province, revealed that 33% of the 288 returnee families interviewed were either headed by a single female, an elderly person (aged 60 or over), or a disabled person (Robinson, 1994:32). Given their tenuous access to land, close to 50% of the people returned under the 1992 UNHCR operation departed from the allocated site. Data on secondary migration show for example that in Battambang and Sankhe districts, of the 1,626 and 1,387 people who arrived respectively in each district, 632 (38.8%) and 795 (57.3%) respectively had departed again by August 1992 (Utting, 1994:212).

To summarize, in the absence of other than meagre and tenuous data on the long term effect of land privatization on rural equity so far, the degree of unanimity on the pernicious nature of the change is quite remarkable. For one it is clear that the inadequacy of Cambodia's property laws in terms of an evolving situation where land is increasingly becoming a marketable commodity, is reflected in an increasing number of land disputes. Land has become an object of monetary relations without acquiring all the attributes of property, that is *'usus, fructus, and abusus'*. The last aspect is absent since, under specific circumstances, the land can revert to the state. It is fair to assume that, for as much as land-disputes are settled out of court in traditional dispute resolution processes, the outcome is comparably efficient from a collective point of view. A participative dispute resolution process can provide this guarantee better than court decisions, since the principal hallmark of individual property is its recognition by the community. As Ratner states: "equity, beyond its strictly economic sense, should be understood as an element of community"(Ratner, 1995:11). It is not reasonable to assume however that the courts are currently in a position to provide an adequate answer to the problem of multi-layered rights, given that they are incapable of ensuring due process. So from an individual outlook, the land disputes incur inopportune transaction costs along with outcome costs. Not only is considerable time and money lost, there are also the disrupted relationships within communities and the prevalent distrust in the legal system, inciting people to 'take the law in their own hands'. Such a situation can hardly be considered to contribute to a broad-based rural development. While it is unclear whether the changing distribution of land ownership – as it currently stands - will determine trends for increasing productivity, it is sure to determine trends to render even more fragile the land rights of groups that are already vulnerable.

⁶² The incidence of poverty averages only 35% in female-headed households, compared to 40% in male-headed households, making gender and poverty patterns by household headship similar to those observed in other East Asian countries (World Bank, 1997:5)

⁶³ The term 'widow' includes unmarried women with children and women who are abandoned or divorced, the so-called 'part-time widows' (*memei pdei leng*)

6. Synopsis and conclusion

Cambodia is an overwhelmingly rural society, where the agricultural sector outsizes the rest of the economy. Rightly, the government has declared on many occasions to make broad-based growth of the rural economy its topmost priority. The need becomes even more acute considering that the pattern of fast economic growth of the last 5 years has demonstrated a sharp urban service-oriented bias, whereas the performance of the agricultural sector has been rather inadequate. As such, Cambodia's potential comparative advantage is not revealed. Inasmuch as the 1996-2000 5-year plan reflects the stated pro-'rural poor' bias, budgetary and Balance of Payments performance suggest another reality.

Nevertheless, mainstreaming rural development is crucial in order to alleviate poverty, given that Cambodia remains one of the poorest countries in Asia. Poverty in Cambodia is concentrated in the rural areas, runs deep (according to most indicators of human development), and there are tell-tale signs of increasing inequality. On the whole, the rural-urban gap is widening, while inequality is also on the rise within the rural areas. The government has earmarked rice and rubber as the focus of its agricultural efforts. Its stated future reliance on FDI rather than aid to make the agricultural sector the engine of growth, has as yet not been warranted by actual patterns of FDI. So far, agricultural investments have been attracted into capital-intensive mega-projects that occupy areas the size of a province in areas that are not part of the central rice-growing basin.

Productivity increases in agricultural sub-sectors will be crucial to consolidate economic growth, given a very erratic contribution to GDP-growth. Considering the dominance of rice in the overall economy of Cambodia, a substantial productivity increase of rice culture will be determinant. In view of the performance of its immediate neighbours, a doubling of production per ha of cultivable land is conceivable. With rice culture being mainly the domain of family-farms, improved sector-performance as a whole depends on them. Yet there are problems, both on the policy-side and in practice. Although the PIP (Public Investment Program) has a declared built-in rural bias, there are gaps between declarations and actually needed projects. The outlook for an effective rural outreach in terms of loans, roads, small-scale canals etc. is therefore not straightforward positive. In the field, the drive for productivity increases runs into the obstacle of below subsistence-sized plots on which most families have to survive, esp. with regard to the majority-crop, rainfed lowland rice culture.

Land access, and with it access to livelihood, is fast becoming a problem for rural families. Next to the presence of mines and mounting demographic pressure, the activation of the land market may contribute significantly to intensifying problems of land access for farmers. At the same time the possible range for land access and income creation has decreased, since even common property resources are privatised contrary to a traditional understanding of tenure arrangements. Although the legal framework gives only possession rights to agricultural land, these are treated by all economic agents as ownership rights since they are transferable, heritable etc.

The mechanisms at work to transfer title to land, besides bona fide voluntary transactions, are the involuntary loss of property, distress sales, and the expropriation of public lands. The 'modern' need, established by the current legal framework, to register claim to the land creates a vulnerability to

counterclaims to land rights, even though the land may have been used continuously for a prolonged period of time. In addition, given that poverty is pervasive in rural areas in the absence of alternative employment opportunities outside agriculture, a slight asset base and high indebtedness intertwine to push farmers into distress sales of land when personal or ecological adversity strikes. Although data are scant and therefore not conclusive – not in the least given the very political nature of the issue - there are numerous indications to suggest that speculative forces are not only ‘creaming off’ the market, but actively interfering in it where land is situated in areas of (potential) high growth. Where free land is still available and hence *de jure* belongs to the state, the tendency is for it to be privatised *de facto* even if unused. In addition to curtailing the potential for income diversification based on CPR benefits, this evolution puts even more pressure on a household's access to ricelands. Given the tenuous hold on land of esp. returnees, this renders their position especially vulnerable, the more so as they are concentrated in 2 provinces. In addition, protected public land is encroached upon and claimed by local villagers as well as speculators.

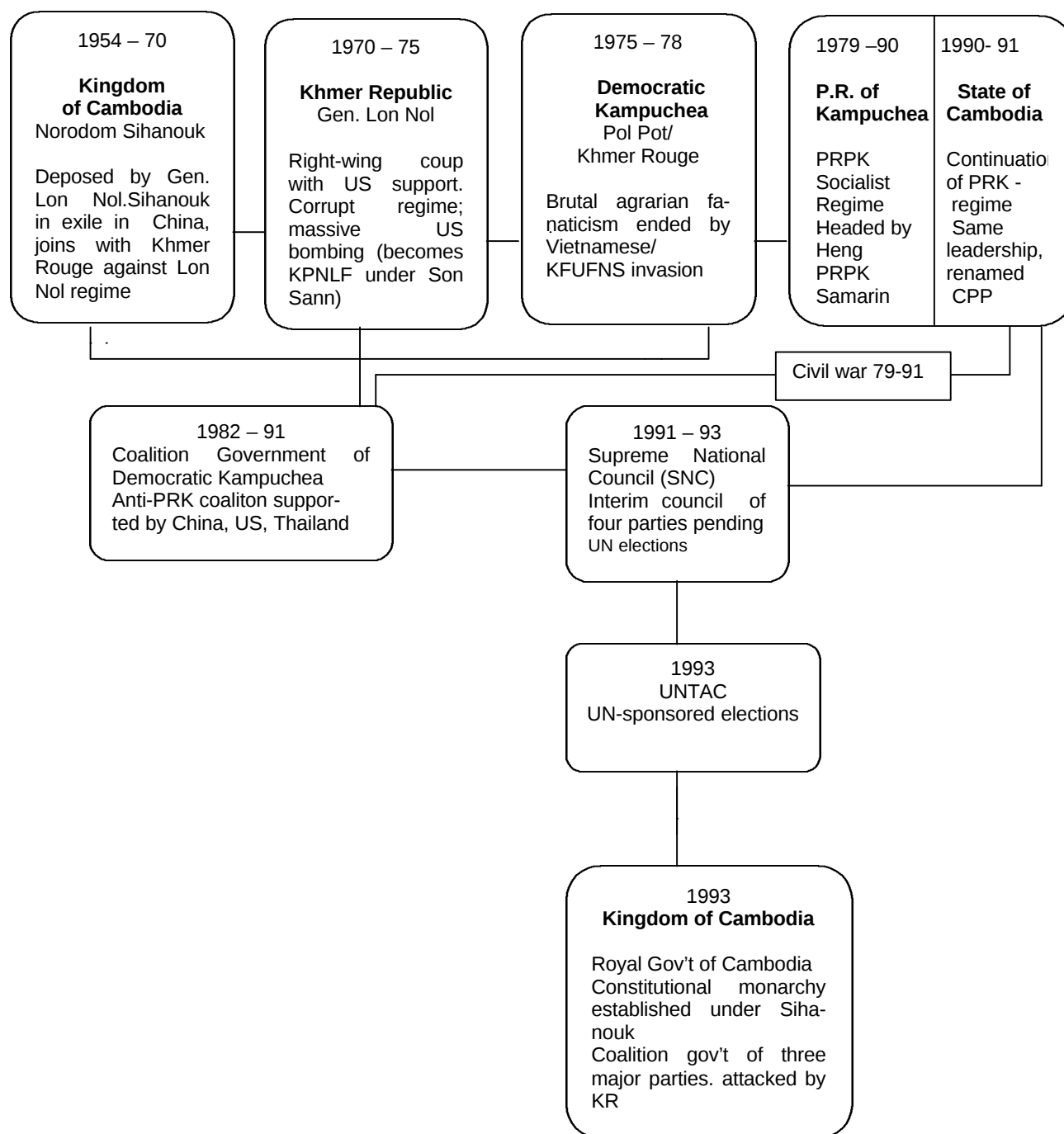
The Boserupian prediction that market change will work out its own institutional solution does not seem applicable. The existing legal framework is very deficient, in the sense that - as a poor synthesis of three different historical legacies of land tenure regimes – it fails to anticipate or even respond adequately to a rapidly evolving situation. Consequently, the active land market gives rise to a host of disputes, that can be weighted differently inasmuch as one stresses one or the other historical legacies present in the current legal framework (traditional vs. modern, private vs. collective well-being etc.). Considerations in this regard will be different according to whether disputes are settled in or out of court. Insofar as disputes are settled in court, it suffices to state that legal security is no public good in Cambodia. The reputation of the Cambodian judiciary does not allow to consider that speculative tendencies will be halted in the light of the interest of equity or collective justice.

All these elements combine into an institutional framework that only manages to regulate access to land against very elevated transaction and outcome costs, where contracts are enforceable only at prohibitive costs. The re-organization of social space does not in and by itself run counter to the professed intentions of the Cambodian state to pump-prime economic growth by agricultural development. It does however re-draw patterns of accumulation, which affects the establishment of a consolidated base for broad and inclusive rural development. This is nowhere as visible as where it concerns the access to land of the most vulnerable groups that make up a significant portion of Cambodian households: returnees, women-led households, and minority ethnic groups. Returnees form the majority of truly landless ‘farmers’, there seems to be a constant bias in land allocation per member of the families headed by single females, and the so-called hill-tribes are confronted with a sell-out of their ancestral lands to which they have no right due to the non-conformity of the practice of swidden agriculture with provisions in the land law. This part of the rural population risks to be left with no productive assets other than their own labour.

Although it may seem clear what sections of the population the current evolving situation is turning into ‘losers’, there is a need for broader, deeper, and more consistent data to establish a more complete and detailed picture. This is *a fortiori* the case for the ‘winners’. While there is a need for more research into these and other aspects such as possible improvements and/or alternatives to the current

legal framework, there is also the need to understand better the lack of popular mobilizing in the rural areas on the basis of these issues. For certainly, if things are to change and a truly enabling environment for the rural poor is to evolve, the major impetus will have to come from the rural poor themselves. Local elections might provide a focal point in this regard, and it would be interesting to see if and how the issue of land access is treated differently in relation to different localised levels of land pressure.

Annex 1: Cambodia's political evolution since independence



Annex 2: Key Economic Indicators

	1991	1992	1993	1994	1995
(percentage change)					
Real GDP	7.6	7.0	4.1	4.0	7.6
CPI (final quarter basis)	150.4	112.5	41.0	17.9	3.5
Domestic Liquidity	28.6	209.0	40.0	29.4	45.0
Net Credits to Government	22.9	141.8	5.6	-7.9	0.6
Velocity of Money	21.8	16.3	19.6	15.4	13.6
(Million of US\$)					
Export of goods (US\$, excl. re-export)	81.0	101.0	168.0	293.0	375.0
Import of goods (US\$, retained import)	113.0	160.0	361.0	644.0	830.0
Gross Official Reserves	..	30.0	71.0	100.0	182.0
(Months of import of goods & services)	..	1.0	1.8	1.5	1.9
(Percentage of GDP unless otherwise specified)					
Budget Revenue	4.4	6.2	5.4	9.6	8.9
Tax	2.3	4.4	4.3	5.9	6.2
Non-Tax	2.1	1.8	1.0	3.7	2.7
Budget Expenditure	7.8	9.8	11.2	16.6	17.0
Current Expenditure	7.4	9.5	6.9	11.2	10.2
Capital Expenditure	0.4	0.3	4.3	5.5	6.8
Current Budget Deficit (accrual basis)	-3.0	-3.3	-1.5	-1.5	-1.3
Current Budget Deficit (Cash basis)	-1.2	-4.3	-1.4	-1.5	-0.6
Overall Budget Deficit (accrual basis)	-3.4	-3.6	-5.9	-7.0	-8.0
Domestic Investment	9.4	9.8	14.3	19.5	22.4
Government Investment	0.4	0.3	4.3	5.5	6.8
Non-Government Investment	9.0	9.5	10.0	14.0	15.6
Financing of Investment	9.4	9.8	14.3	19.5	22.4
National Savings	7.9	7.3	5.6	5.8	7.5
Government Savings	-1.2	-4.3	-1.4	-1.5	-0.6
Non-Government Savings	9.1	11.6	7.0	7.3	8.1
Foreign Savings	1.5	2.5	8.7	13.7	14.9
Ext. Current Acc. Deficit (US\$millions)	-28.0	-50.0	-190.0	-330.0	-434
(in percent of GDP)	-1.5	-2.5	-8.7	-13.7	-14.9
Memorandum items;					
Nominal GDP (billions of riels)	1,336.0	2,508.0	5,414.0	6,131.0	7,200.0
Official exchange rate (Riels/US\$)	703.0	1,253.0	2,470.0	2,543.0	2,462.0

Source: World Bank, 1996

Annex 3: Investment Projects Approved in Cambodia, August 1994 – July 1998

	1994	1995	1996	1997	1998	Total '94-'98	Sectoral Share (%) '94 – '98
Number of investment projects							
Agricult.	7	32	33	27	4	103	15
Industry	27	91	135	170	71	494	72
O/w garment	12	27	42	105	49	235	34
Services	5	40	24	9	9	87	13
Total	39	163	192	206	84	684	100
Registered Capital (millions \$)							
Agricult.	119	70	82	93	10	375	11
Industry	97	357	332	306	136	1,229	37
O/w garment	76	20	40	103	58	295	9
Services	7	1,574	76	22	32	1,711	52
Total	223	2,001	489	421	179	3,314	100
Fixed assets (millions \$)							
Agricult.	60	70	96	30	19	275	5
Industry	487	593	551	642	270	2,541	49
O/w garment	29	27	45	110	74	285	6
Services	50	1,859	171	113	156	2,350	45
Total	597	2,521	818	784	445	5,166	100
Manpower (under full production)							
Agricult.	1,709	8,775	8,523	4,187	1,946	25,140	8
Industry	17,222	32,669	57,219	123,545	39,272	269,927	86
O/w garment	12,828	14,557	25,326	82,565	29,553	164,829	53
Services	2,883	6,271	5,769	1,171	2,100	18,194	6
Total	21,814	47,715	71,511	128,903	43,318	313,261	100

(Source: Cambodia Development Review, 1998:12)

Annex 4: Rice land distribution

Rice-land distribution: % share of rice land (1994-95) by % share of households (1998); estimates on the basis of provincial data

Province	Rice land (ha)	# of HH	rice land ha/HH ascending	HH% of total	HH% cum.	rice land% of total	rice land % cumul
Phnom Penh	9820	76248	0,129	4,03	4,03	0,48	0,48
Koh Kong	5200	19559	0,266	1,03	5,06	0,26	0,74
Kampong Som	8800	28013	0,314	1,48	6,55	0,43	1,17
Kandal	85800	195729	0,438	10,35	16,90	4,21	5,38
Kaep	2590	5367	0,483	0,28	17,19	0,13	5,50
Kampong Cham	187890	304794	0,616	16,12	33,31	9,22	14,72
Kratie	26620	34516	0,771	1,83	35,14	1,31	16,03
Kampong Speu	85600	107999	0,793	5,71	40,85	4,20	20,23
land<0.92:total	412320	772225	0,534	40,85		20,23	
Ratanakiri	13040	13562	0,962	0,72	41,57	0,64	20,87
Preah Vihear	17000	17351	0,980	0,92	42,48	0,83	21,70
Kampong Chhnang	86100	74762	1,152	3,96	46,44	4,22	25,92
Monduliri	5500	4398	1,251	0,23	46,67	0,27	26,19
Kampot	130600	98869	1,321	5,23	51,90	6,41	32,60
Kampong Thom	128980	94540	1,364	5,00	56,90	6,33	38,93
Pursat	80750	57367	1,408	3,03	59,94	3,96	42,89
Stung Treng	13950	9873	1,413	0,52	60,46	0,68	43,58
Battambang	175510	122743	1,430	6,49	66,96	8,61	52,19
Prey Veng	263720	183116	1,440	9,69	76,64	12,94	65,12
0.92>land<1.5	915150	676581	1,353	35,79		44,90	
Banteay Meanchey	141500	93489	1,514	4,95	81,59	6,94	72,07
Takeo	227350	147723	1,539	7,82	89,40	11,15	83,22
Svay Rieng	156920	94113	1,667	4,98	94,38	7,70	90,92
Siem Reap	185090	106106	1,744	5,61	100,00	9,08	100,00
land>1.5	710860	441431	1,610	23,35		34,87	
Total	2038330	1890237	1,078	100,00		100,00	

Sources: column I.A: calculations based on Nesbitt, 1996:table 5.2 (area planted to rice per province by ecosystem, 1994-95)

I.C: Census, 1998:29 (Cambodia rural: number of households by province)

Cultivated land distribution: % share of cultivated land by % share of farmer families (1960)

Land size	farmer families		hectare	land owned % share	cultivated land ha/family
	# families	% share			
< 1 ha	257900	30,7	154600	5,18	0,60
1 ha - 2 ha	187300	22,3	317800	10,66	1,70
2 ha - 5 ha	273800	32,6	1130900	37,9	4,13
5 ha - 10 ha	87400	10,4	740600	24,82	8,47
10 ha - 20 ha	28500	3,4	471500	15,8	16,54
> 20 ha	5100	0,6	168600	5,65	33,06
Total	840000		2984000		3,55

Source: Columns II.A-E; Lim Voan, Land Titling Workshop Battambang: report, 1997:17

Annex 5: Common Property Resources

Average annual gross income (in '000 riel) per HH by source, 1995-96

	Homestead land/water	Agric.land	CPR	Other	Total
Phnom Penh	2246,85	657,98	805,19	2161,74	5871,76
Kandal	5471,97	832,72	246,25	610,83	7161,77
K.Cham	1546,61	667,17	262,23	1128,99	3605,00
K.Chnang	1157,57	5073,74	466,88	1052,33	7750,52
Siem Reap	890,14	1295,10	185,89	408,21	2779,34
Pursat	1167,92	1391,46	372,91	579,27	3511,56
Battambang	16450,14	1053,84	719,60	961,82	19185,40
K.Thom	374,73	573,01	411,40	499,27	1858,41
Total	29305,93	11545,02	3470,35	7402,46	

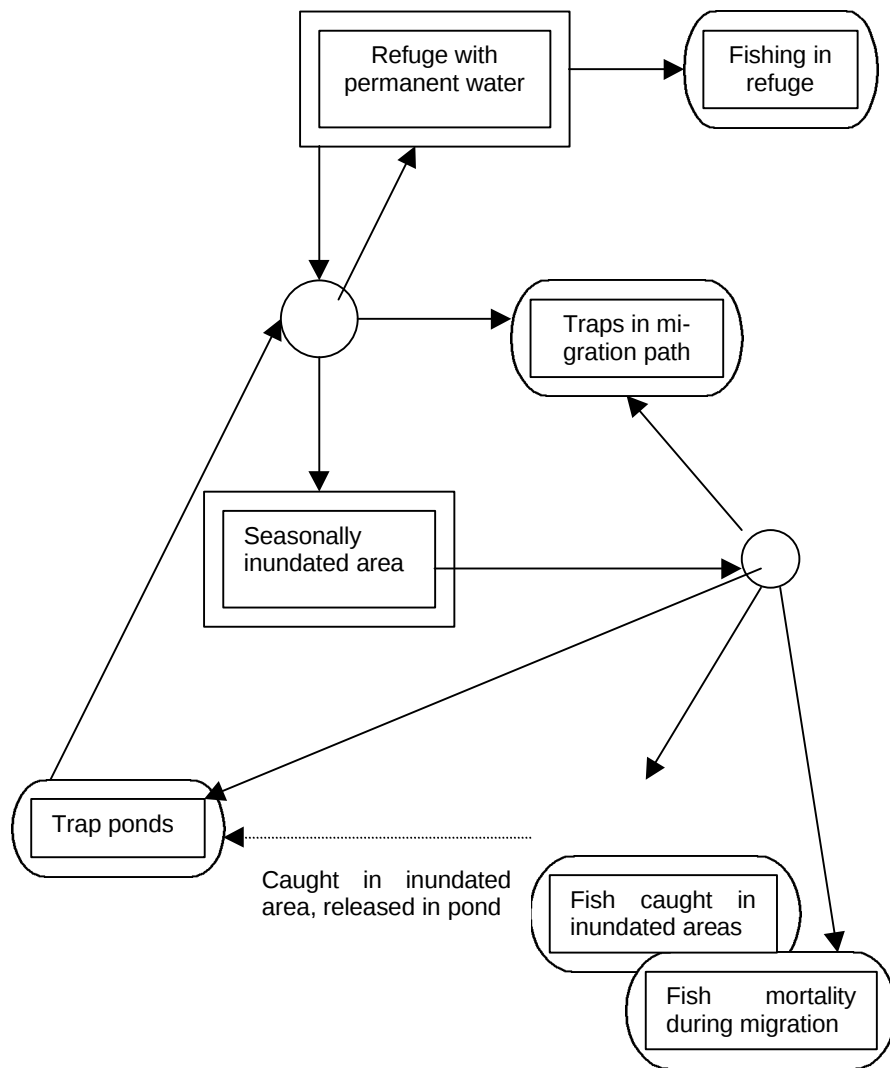
Source: adapted from Ahmed et.al, 1998:44

CPR Access Index (% and # of HH), by province (1995-1996), and % of HH reporting declining trend in CPR access, by province across categories (1995-1996)

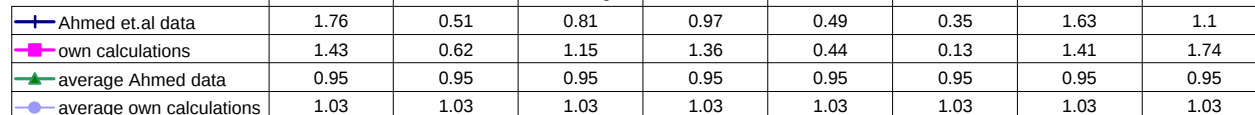
	Average access of HH to CPR benefits across CPR categories, per commune (%)	Average area of CPR per commune; all categories (ha)	CPR Access Index: B/C Average CPR access holders/ha CPR, by province (%)	# of rural HH/province ('000)	CPR Access Index: # of HH (E/100) x D (# of HH)	HH reporting declining trend in CPR access, by province, across categories (%)
Phnom Penh	50,96	655,9	0,078	76,248	59,47	49,1
Kandal	36,03	434,3	0,083	195,729	162,45	63,1
K.Cham	60,70	622,4	0,097	304,794	295,65	64,34
K.Chnang	36,56	376,0	0,097	74,762	72,52	92,26
Siem Reap	40,46	1621,2	0,025	106,106	26,52	90,86
Pursat	70,08	1664,1	0,042	57,367	24,09	74,32
Battambang	67,63	8117,4	0,008	122,743	9,82	91,1
K.Thom	52,22	150,4	0,347	94,540	328,05	66,84
Average		1687,7	0,097		122,32	73,99

Sources: B and C: Ahmed et.al, 1998:40-41; E: Census, 1998:29; G: Ahmed et.al, 1998:132-133

Annex 6 Ricefield fisheries: flowchart



(Source: adapted from Nesbitt, 1996:163)



Annex 8: Average rice land / HH, Cambodian map, by province

Bibliography

- ANGOC (Asian NGO Coalition for Agrarian Reform and Rural Development), *How much land does a man need?* A regional Report and Overview on Agrarian Reform in South East Asia, January 1998
- Annear Peter, *Case Study of Cambodia 1954 – 1995; Economic and Political Development, Poverty and Health Care*, 1996
- Asian Development Bank, *Technical Assistance, Rural Finance Study*, Draft Interim Report by Prins Hendrik, October 1996
- Bann Camille, *An Economic Analysis of Tropical Forest Land Use Options, Ratanakiri Province*, Cambodia, Economy and Environment Program for Southeast Asia, June 1997
- Butterfield Rebecca, *Land Use Allocations and Community Livelihoods: Policy Issues*, Forest Policy Reform Process project, October 1997
- Cambodia Daily, *National Park encroachers include officials*, 06/11/1997:8
- Cambodia Daily, *"Whose Land is it?"*, by Mhari Saito, Volume 1, Issue 9 April 18, 1998
- Cambodia Daily, *"1998 Generous to Defense, Cruel to Health"* by Mhari Saito, 15/12/1998
- Cambodia Times, *Park Land being sold illegally*, 26/05/1997:4
- Cambodian Court Training Project, *Land Law and Land Disputes, Training Materials*
- Cambodian Land Legislation and FM-International by FINNMAP, *An Overview and Evaluation of the Cambodian Land Legislation in an International Context*, 1997
- CDRI, *Rethinking Food Security*, A report on the preliminary findings of the CDRI/UNRISD, Workshop report, February 1997
- CDRI, *Women and land rights in Cambodia*, Field report
- Chandler David, *The tragedy of Cambodian History; Politics, War and Revolution since 1945*, Yale University, Silkwood books, Thailand, 1991
- CMAC (Cambodian Mine Action Centre), *Land Use Planning and Land Management in Mined Areas for Development*, Report of a workshop, Battambang, June 1998
- Collier, Paul, *Research Summary 1997*, Centre for the Study of African Economies, Institute of Economics & Statistics, Oxford University, 1998
- Colm Sara, *Land Rights: The Challenge for Ratanakiri's indigenous communities*, in Watershed Vol.3, no. 1, July – October 1997
- Colm Sara, *Options for Land Security among Indigenous Communities*, Ratanakiri, May 1997
- Conway Tim, *Between the Cold War and the Peasantry; geopolitics, rural rebellion and revolutionary ideology in the Khmer Rouge revolution*, Thesis at University of Cambridge, December 1993
- Davenport, Healy and Malone, *Vulnerable in the Village; A Study of Returnees in Battambang Province, Cambodia, with a focus on strategies for the landless*, UNHCR, 1995
- Ear Sophal, *Cambodia's economic development in historical perspective*, Department of Economics, University of California Berkeley, August 1995
- Economic Intelligence Unit, *Country Report Cambodia and Laos, 2nd quarter 1998*, UK, 1998
- Faculty of Business in Phnom Penh, *Cambodian Property Law*, January 1998
- FAO/UNDP, *Cambodia, Agricultural Development Options Review (phase I)*, La question foncière, March 1994
- FAO/WFP, *Special report; Crop and Food Supply Assessment Mission to Cambodia*, February 1997
- FAO/WFP, *Special report; Crop and Food Supply Assessment Mission to Cambodia*, February 1996
- Global Witness (Press Release), *Illegal logging poses real threat to democratic process*, February 1998
- Greve Hanne Sophie, *Land Tenure and Property Rights in Cambodia*, Phnom Penh, 1993
- GTZ, *Land Management Project; Participatory Rural Cadastral Appraisal*, February 1998
- Guardian Weekly, *'Living a footstep away from death'* by Convery P., October 4, 1998
- Hirsch Philip, *Economic Integration and the Political Economy of Environment in the Mekong River Basin*, Jakarta Conference Paper, January 1998
- IMF Central Asia Department, *Macro-economic Experiences of the Transition Economies in Indochina*, IMF working paper no. WP/96/112, October 1996
- IRRI, MAFF and Australian AID, *The Cambodia-IRRI-Australia Project; Programs and achievements*,
- Kannan K.P., *Economic Reform, Structural Adjustment and Development in Cambodia*, CDRI, Working Paper No.3, January 1997
- Kato et.al., *Regional Economic Integration for Sustainable Development in Cambodia*, Working Paper No. 5, CDRI, September 1998
- Kerkvliet Benedict and Doug Porter, *Rural Vietnam in Rural Asia*, Vietnam's Rural Transformation; edited by Kerkvliet and Porter, Westview Press 1995, 251 p.
- Kingdom of Cambodia, *The National Program Framework for Rural Development of the Ministry of Rural Development*, September 1997
- Kosal and Kalyanna, *Rice and Credit Systems; A case study of Chbar Mon and Samraong Tong Districts of Kampong Speu Province*; CDRI Survey Practice Report, March 1993
- Land Tenure Center, *Legal Uncertainty and Land Disputes in the Peri-Urban Areas of Mozambique: Land Markets in Transition*, Research paper no. 121, University of Wisconsin-Madison, January 1995
- Land Titles Department and Cadastral Mapping/Land Registration, *A Draft Final Report; On the Land Titling of Cambodia*, 1996
- Meijers Hanneke, *Land Tenure*; Paper prepared for Gender and Development Studies Center, AIT, Bangkok, May 1996

- Mahfuzuddin Ahmed, et.al., *Socio-Economic Assessment of Freshwater Capture Fisheries of Cambodia, Report on a Household Survey*, Mekong River Commission, 1998
- Ministry of environment, *Cambodia National Environmental Action Plan 1998-2002*, January 1998
- Ministry of Rural Development/UN WFP and Vulnerability Analysis Mapping Unit, *1997 Village and Commune Targeting Exercise*, March 1997
- National Assembly, *Land Law*, August 1992
- National Institute of Statistics, *General Population Census of Cambodia 1998; Provisional Population Totals*, July 1998
- National Institute of Statistics, *Report on the Cambodia Socio-Economic Survey 1997*, Phnom Penh, 1997
- Nesbitt H.J. (ed), *Rice Production in Cambodia*, Cambodia-IRRI-Australia Project, University Press, 1996
- New York Times, "Rebuilding Cambodia's Shattered Legal System", by Mydans Seth, Feb. 1997
- Norwegian People's Aid, *Assessment of Minefields Cleared by CMAC*, Phnom Penh, 1996
- Ovesen, Trankell and Ojendal, *When every household is an island; Social Organization and Power Structures in Rural Cambodia*, Uppsala Research Reports in Cultural Anthropology No. 15; 1996
- Rasmei Kampuchea, *Termination of Mr. Sar Out's investment in tea plantation*, 19/11/1997
- Ratner Blake, *NGO Approaches to Agricultural Extension in Cambodia: Developing Participation in Context*, Cornell International Institute for Food, Agriculture and Development, January 1995
- Red Cross., *Cambodia Mine Incidents Report for 1997*, June 1998
- Robertson et.al, *Cambodia: Strengthening the Foundation for Trade and Industrial Development*, CDRI, Phnom Penh, 1998
- Robinson Court, *Rupture and Return; Repatriation, Displacement and Reintegration in Battambang Province*, Indochinese Refugee Information Center, Institute of Asian Studies and Chulalongkorn University, Occasional paper Series no. /007; 1995
- Robinson Court, *Something like home again; The repatriation of Cambodian Refugees*, US Committee for refugees, May 1994
- Royal Government of Cambodia and UNDP, *Eradicating Poverty*, August 1996
- Royal Government of Cambodia, *Socio-economic Development Status, Requirements and Proposals*, May 96
- Russel RM, *The Resolution of Court Cases Relating to Land in Cambodia*, University of Queensland, 1996
- Scott, James.C., *The moral economy of the peasant: rebellion and sustenance in southeast Asia*, Yale University Press, 1976
- Shams, Yon and Tong, *Farming Systems – Province Pursat*, CCDP and Provincial Division of Agronomy Pursat, 1993
- Solieng Mak, *Rainfed lowland Rice Farming in Cambodia, A study of Agricultural Change*, University of Western Sydney, March 1997
- Sophal Chan, et.al, *Cambodia in the Regional Economy: A Cross Country Study*, CDRI, Phnom Penh, October 1998
- Sophal Chan, et.al, *Cambodia: the Challenge of Productive Employment Creation*, Working paper No; 267, Stockholm School of Economics, October 1998
- Thion Serge, *Watching Cambodia*, White Lotus, Bangkok 1993
- Tickner Vincent, *Food Security in Cambodia; a preliminary assessment*, UNRISD Discussion Paper No 80, October 1996
- U.S. Department of State, *Cambodia Report on Human Rights Practices for 1996*, Bureau of Democracy, H.R. and Labour, Jan. 1997
- Utting Peter, *Between Hope and Insecurity*, UNRISD, Geneva, 1994
- UNDP, *Cambodia Human Development Report 1997*, Phnom Penh, November 1997
- UNDP, *Human Development Report 1996*, Oxford University Press, 1996
- UNDP, *Land Titling Workshop Report*, Batambang, November 1997
- UNHCR, *The Problem of Access to Land and Ownership in Repatriation Operations*, Inspection an Evaluation Service, May 1998
- Voan Lim, *Regime of Land Control in Cambodia*, Land Title Department, July 1995
- Williams Shaun, *Where has All the Land Gone?* Land Study Project, Phnom Penh, October 1998
- WORLD BANK, East Asia and Pacific Region Country Department 1, *Cambodia, from Recovery to Sustained Development*; May 1996
- WORLD BANK, East Asia and Pacific Region Country Department 1, *Cambodia, Progress in Recovery and Reform*; June 1997