

**CAMBODIA**  
***The Challenge of Productive Employment Creation***

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**ABSTRACT**

Economic growth in Cambodia came to an abrupt halt in 1997 as the home made political crisis and the external financial crisis took their toll. However, Cambodia has been comparatively mildly affected by the Asian crisis and provided that political stability can be achieved there are good chances that the economic decline in 1997 will become little more than a parenthesis. A more fundamental development challenge facing the country is the very rapid increase in the labour force as the large cohorts born in the early 1980s enter the labour market. A major weakness in the economic development to date has been its narrow base. It has largely been attributed to growth in the urban industrial and services sectors, while the performance of agriculture has been rather lacklustre. The twin goals of productive employment generation and poverty alleviation will require a much more dynamic development of agriculture and of the rural economy as a whole to succeed. Access to productive assets – that is land, physical and human capital – and insecurity arising from the absence of rule of law are identified as the factors with the strongest bearing on poverty.

Keywords: Cambodia, economic development  
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# **Chapter One**

## **An Overview of Recent Economic Performance**

Cambodia experienced two major crises in 1997, an internal political crisis (the event of 5 and 6 July) and an external economic crisis (the financial crisis in Asia). The July event was precipitated by the conflicts between two major political parties, and changed fundamental conditions of domestic economic activity in Cambodia. The confidence in political stability was lost, the security and safety of citizens and enterprises in Cambodia were seriously threatened, and the future political environment has become uncertain. The international community responded to the political turbulence in July by the termination or suspension of foreign assistance to Cambodia. Soon after the July events the ASEAN countries decided to postpone Cambodia's joining ASEAN which had been scheduled for the end of July 1997.

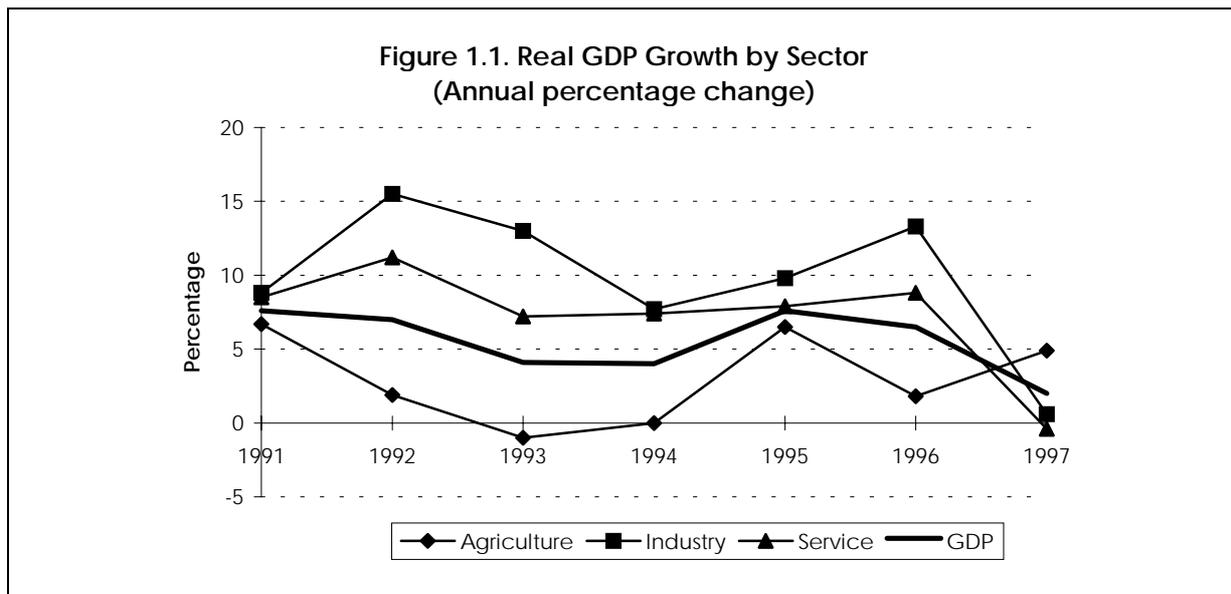
The adverse effect of the July event was compounded by the financial crisis in Asia which erupted in Thailand and spilled over to other Asian countries such as Malaysia, the Philippines, Indonesia, and Korea. The Asian crisis dramatically changed external economic environment surrounding Cambodia. The realignment of foreign exchange rates in the crisis countries took place in an unprecedented pace, and affected the competitiveness of Cambodia's goods and services in domestic, regional, and world markets. The slowdown of economic growth in those countries have been gradually affecting Cambodia through foreign trade and investment.

Under the circumstances, assessing the extent to which the two major crises have affected Cambodia's economy is of great interest for those involved in development in Cambodia. In particular, it is critical to assess their implications for reconstruction and development in Cambodia which had gathered a momentum since the coalition government was formed in 1993. Whether, and to what extent, has Cambodia lost the momentum which had been maintained until the middle of 1997? What are policy implications for Cambodia's new government? These are some of the questions that this and the following chapter seeks to answer.

### **1.1 Real Sector Development**

#### ***GDP growth by sector***

Cambodia's economic growth slowed in 1997 according to recently published official statistics. The growth rate of real gross domestic product (GDP) declined sharply to 2 percent in 1997 from 6.5 percent the previous year (Table 1.1; Figure 1.1). Consequently, per capita GDP declined in 1997 for the first time since Cambodia's transition to a market economy.



The pattern of economic growth by sector changed notably in 1997. Until 1996, the industry and service sectors contributed significantly to moderate economic growth. However, the growth rate in the industry sector dropped from 13 percent in 1996 to only 0.6 percent in 1997, and that in the service sector from 9 percent to -0.4 percent (Table 1.1). The slowdown of these sectors was caused primarily by the events of 5 and 6 July 1997. The crisis in July not only damaged the production capacity of many factories and shops in Phnom Penh, but also had a substantial adverse impact on consumer spending, investment, and tourism and related service sectors (see Chapter Two).<sup>1</sup>

There is some discrepancy between the 1997 growth rate of the agricultural sector according to official statistics, i.e. 4.9 percent, and other statistics on agricultural production. According to the Ministry of Agriculture, Forestry and Fisheries (MAFF), total rice production was around 3.4 million tons in 1997, slightly lower than the level in 1996. Given the large proportion of rice in total agricultural production (about one third of total agricultural production in 1996), achieving 4.9 percent growth would be extremely difficult unless the production of other crops, fishing or forestry had expanded exceptionally. The volume of production of these crops, however, does not appear to have shown any significant changes in 1997, according to the estimates of MAFF.

<sup>1</sup> By mid-1998 the official forecasts for 1998 were as follows: Growth rate of real GDP, 3.5%; Growth rate of CPI, 10.0%; Central government operations as % of GDP, revenue 8.9%, expenditure 13.6%, deficit 4.7%; Balance of current account as % of GDP, -12.6% (Economic and Financial Review, no. 9-10). The estimates are based on an exchange rate of 3,000 riels per USD. In the light of the drought affecting agricultural production and the political turmoil after the elections, these forecasts appear to be somewhat optimistic.

**Table 1.1**  
**Basic Macro-Economic Indicators.**

	1992	1993	1994	1995	1996	1997
Growth rate of real GDP	7.0	4.1	4.0	7.6	6.5	2.0
Agriculture	1.9	-1.0	0.0	6.5	1.8	4.9
Industry	15.5	13.0	7.7	9.8	13.3	0.6
Service	11.2	7.2	7.4	7.9	8.8	-0.4
Growth rate of real GDP per capita	1.6	0.3	1.8	4.0	1.5	-0.7
Gross domestic savings (% of GDP)	6.2	5.3	4.8	5.4	5.4	4.4
Gross domestic investment (% of GDP) <sup>(1)</sup>	9.8	17.8	18.5	21.6	20.9	17.6
Growth rates of CPI (final quarter basis)	112.5	41.0	17.9	3.5	9.0	9.1
Growth rates of money supply (M2)	214.0	34.4	34.9	44.3	40.4	16.6
Exchange rates (riels/USD)	1,267	2,689	2,545	2,451	2,624	2,989
Central government operations (% of GDP)						
Expenditure	9.8	11.2	16.5	16.7	16.4	13.9
Revenue	6.2	5.4	9.6	8.9	9.1	9.2
Overall budget surplus(+)/deficit(-)	-3.6	-5.9	-6.8	-7.7	-7.2	-4.8
Balance of payment						
Growth rates of merchandise exports (%)	24.5	7.2	62.8	75.2	-18.5	-4.9
Growth rates of merchandise imports (%)	43.1	34.3	56.5	64.6	-8.5	-8.5
Balance of trade (USD million)	-86	-187	-275	-404	-450	-388
Balance of current account (USD million)	-50	-251	-329	-476	-487	-409
Balance of current account (% of GDP)	-2.5	-12.5	-13.7	-16.2	-15.5	-13.2
Foreign direct investment (USD million)	33	54	69	151	294	204
Foreign debt						
External debt outstanding (USD million)	1,873	1,862	1,944	2,030	2,108	2,239
Debt-service ratio	4.1	20.5	0.7	3.0	5.2	3.2

(1) The sum of gross fixed capital formation and increases in stocks (inventories).

Source: ADB (1998).

### ***Domestic investment***

Cambodia's economic growth from 1992 to 1996 was attributed partly to strong growth in domestic investment during this period. Gross domestic investment (GDI), which accounted for only 10 percent of GDP in 1992, expanded rapidly and reached 21 percent of GDP in 1996. In 1997, however, the same ratio declined by 3 percentage points to 18 percent of GDP. This sharp decline, which was primarily caused by the twin crises, is a concern for future prospects of economic growth in the medium to the long term.

The trend of gross domestic investment in 1997 was consistent with another source of data on investment projects approved by the Cambodia Investment Board (CIB). Table 1.2 summarises this. The CIB data should be read with caution, however, as the approved

investment projects may not necessarily have been implemented after their registration with CIB. According to the CIB data, private investment in Cambodia declined in 1997 relative to the level in 1996. The overall decline in approved investment projects in 1997 arose from a sharp decline in the service and the agricultural sectors. In contrast with these sectors, investment projects in the industry sector, particularly garment, increased substantially in 1997, and even in the first quarter of 1998 (see sectoral issues below for details).

**Table 1.2**  
**Investment Projects Approved in Cambodia.**

	1994*	1995	1996	1997	1998**	Total 1994-98	Sectoral share (%) 1994-98
<i>Number of investment project</i>							
Agriculture	7	32	33	27	3	102	16
Industry	27	91	135	170	41	464	71
O/w: Garment	12	27	42	105	26	212	33
Service	5	40	24	9	7	85	13
Total	39	163	192	206	51	651	100
<i>Registered capital (million of USD)</i>							
Agriculture	119	70	82	93	8	373	11
Industry	97	357	332	306	91	1,183	36
O/w: Garment	76	20	40	103	29	266	8
Service	7	1,574	76	22	28	1,707	52
Total	223	2,001	489	421	128	3,263	100
<i>Fixed assets (million of USD)</i>							
Agriculture	60	70	96	30	18	274	6
Industry	487	593	551	642	102	2,374	48
O/w: Garment	29	27	45	110	31	242	5
Service	50	1,859	171	113	85	2,278	46
Total	597	2,521	818	784	205	4,925	100
<i>Manpower, full production</i>							
Agriculture	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
Service	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

\* August - December 1994

\*\* Quarter 1 (January - March), 1998

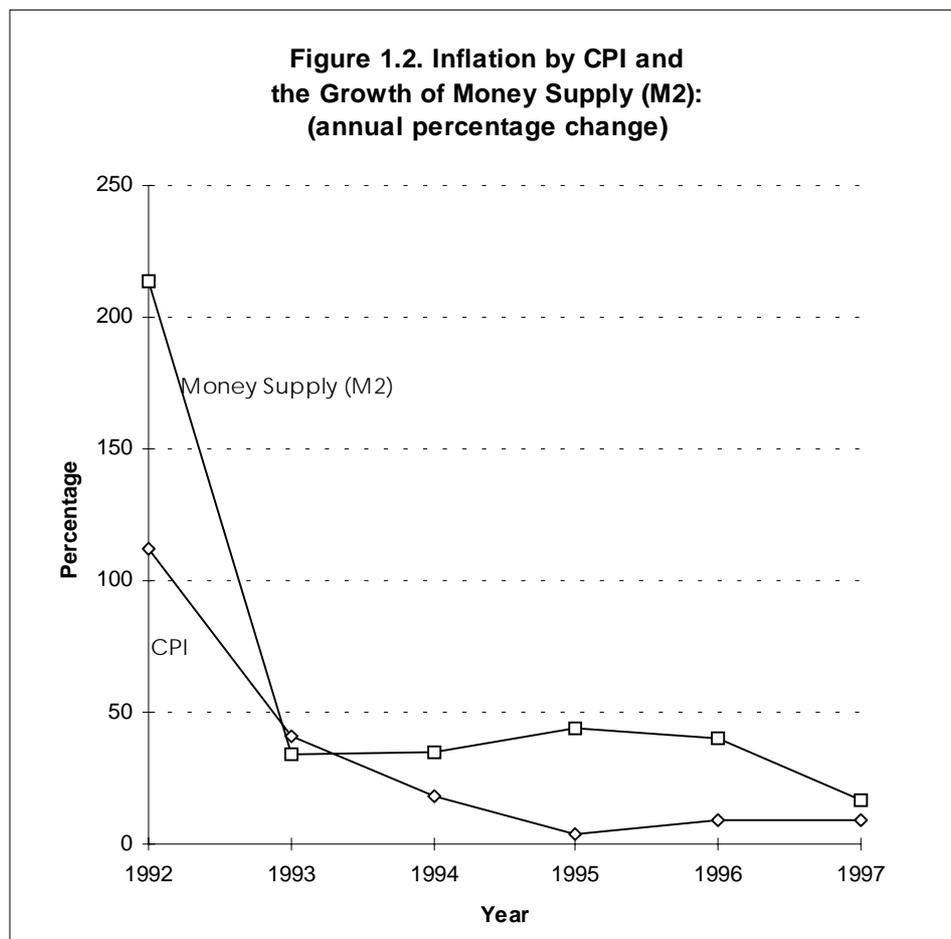
Source: CDRI calculation based on Cambodia Investment Board data

Remark: 'Registered capital', 'fixed assets' and 'manpower' refer to intentions specified in the requests for approval. It should be noted that approval of an investment does not automatically imply that the investment will be implemented or that the targets with regard to assets and employment will be met.

## 1.2 Prices and Foreign Exchange Rates

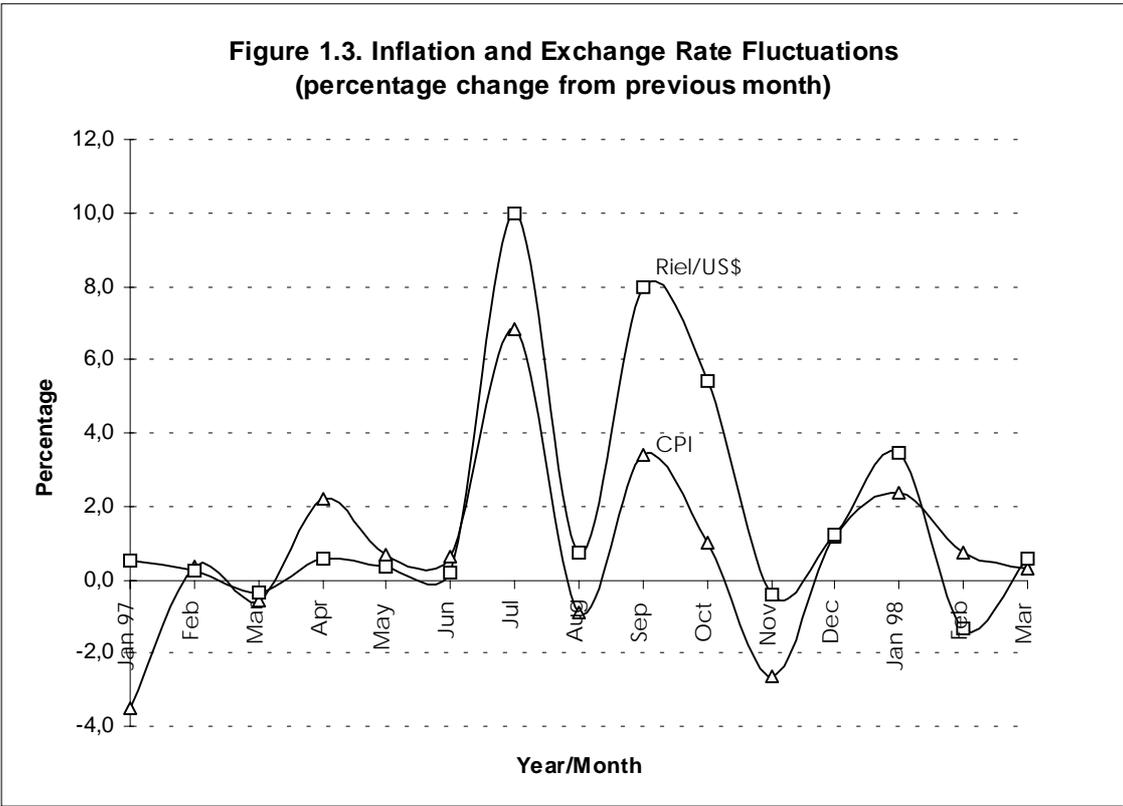
### *Prices*

Inflation in Phnom Penh was once contained around an annual rate of 5 percent in 1994 and 1995. However, it increased to 9 percent in 1996, and the relatively high rate was carried over to 1997, 9.1 percent (table 1.1; figure 1.2). The large fluctuation of inflation rates became apparent particularly in the second half of 1997. Consumer prices in Phnom Penh soared by monthly 6.8 percent in July due to the July event in 1997 (Figure 1.3; Appendix Table 1). There are evidences that many people in Phnom Penh rushed to markets to buy a large amount of rice and gasoline during and immediately after the July event last year.<sup>2</sup> Consumers' expectation of supply shortage may explain the price surge at this time. Another factor which contributed to the large fluctuations of inflation rates in the second half of 1997 was the rapid depreciation of Cambodia riels against the US dollar. The weakening of the riels against the US dollars was reflected in the increase in the riel-denominated prices of imported products. As figure 1.3 illustrates, the fluctuations of foreign exchange rates were closely associated with the price changes in Cambodia in 1997.

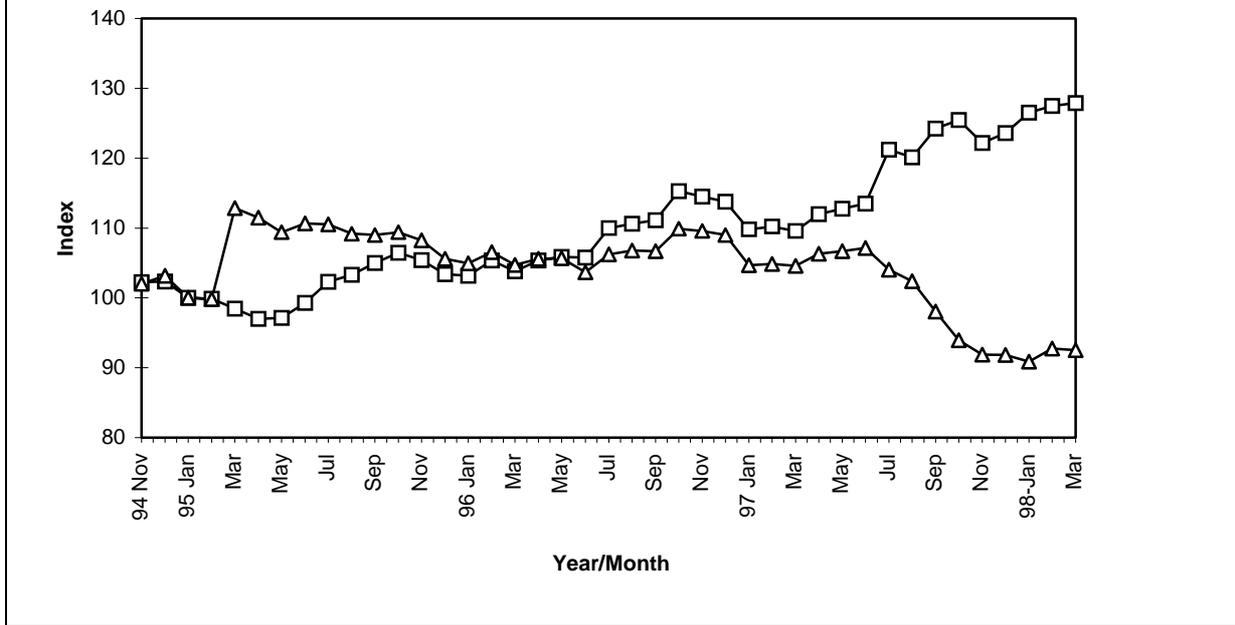


<sup>2</sup> CDRI (1997)

The relevance of standard CPI as an indicator of the cost of living becomes unclear when the economy is dollarised. This is because CPI is typically measured in national currency. It is true that the CPI denominated in Cambodia riels reflects the cost of living of people who earn their income in the riels. In a dollarised economy, however, a large proportion of economic transaction including payments of wages and earnings are actually undertaken in US dollars. Thus the cost of living of people who earn in US dollars needs to be measured in US dollars, as the change of foreign exchange rates affects the purchasing power of their wages and earnings. Figure 1.4 illustrates the recent change of CPI measured in US dollars and CPI in Cambodia riels. CPIs in riels and in US dollars showed a similar trend until June 1997, then moved to the opposite direction after July 1997. The cost of living measured in US dollars actually declined after July 1997 as the depreciation of the riels was greater than the increase in prices denominated in the riels.



**Figure 1.4. CPI Denominated in Riels ( ) and USD ( )**  
**(Base: January 1995 = 100)**



Dollarisation may be exacerbating unequal distribution of income in Cambodia. This cost of dollarisation has received little attention in the literature. There are two groups of Cambodian workers: those who earn wages/salaries in US dollars and those who earn incomes in Cambodian riels. The former is likely to belong to the middle- and high-income groups, whilst the latter are a large portion of population who belong to the low income group. Under these circumstances, the tendency towards depreciation of the riel against the US dollar will affect these two groups of workers in opposite directions. That is, it increases the purchasing power of dollar-denominated wages/salaries, whilst decreasing that of riel-denominated earnings. As a consequence, income distribution is likely to become more unequal than that before the depreciation of the riel against the US dollar.<sup>3</sup>

### ***Real exchange rates***

The recent realignment of foreign exchange rates raises a concern whether and to what extent the competitiveness of Cambodia's goods and services has been affected. Observing nominal exchange rates alone does not fully answer this question, because the relative movement of prices of goods and services in Cambodia and trading countries also affects competitiveness. A widely used indicator of competitiveness is real exchange rates (RER), which consider the relative movement of prices.<sup>4</sup>

The RER of the Cambodian riel against the Thai baht and the Singapore dollar are shown in Appendix, Table 2. Thailand and Singapore were selected because they were the two largest trading partners of Cambodia in 1995 and 1996. The RER of the riel against the baht fell by 16 percent from July 1997 to January 1998, clearly indicating the decline of

<sup>3</sup> For more detailed analysis of costs and benefits of dollarisation, see Menon (1998).

<sup>4</sup> RER is defined as:  $E \times P^f / P^d$  where  $E$  is the nominal exchange rate (domestic currency units per foreign currency unit),  $P^f$  is the price of a foreign basket (of goods) and  $P^d$  is the price of a domestic basket.

Cambodia's competitiveness against Thailand. By contrast, the RER of Cambodia with Singapore remained at more or less the same level in 1997. While Cambodia's nominal exchange rates depreciated against the Singapore dollar in the second half of 1997, the prices of Cambodia's goods and services increased more than those in Singapore. Domestic inflation in Cambodia thus offset the gain of competitiveness due to the depreciation of nominal exchange rates during that period. The nominal exchange rate of the riel against the baht bounced back after January 1998 (see Chapter Two on impacts of the crises). This indicates that competitiveness in Cambodia began to recover from February 1998.

### **1.3 Monetary and Financial Sector Development**

#### ***Money supply***

The analysis of money supply in Cambodia requires a special caution because large amounts of foreign currencies are widely circulating in Cambodia's economy. The official record of money supply published by the National Bank of Cambodia (NBC) does not include the amount of US dollars, Thai baht, and other foreign currencies that circulate outside the banking system in Cambodia. Nevertheless, monitoring available data provide some indications, if not fully, of the recent development of money supply in Cambodia.

The annual growth rates of money supply (M2) were maintained around 35 to 40 percent during the booming period between 1993 and 1996 (Table 1.1). The steady growth of money supply contributed to containing inflation during that period (Figure 1.2). The growth rate of money supply, however, declined sharply to 16.6 percent in 1997.

Observing the component of money supply helps understand the cause of the decline in 1997. The growth of money supply, measured by M1 (currency in circulation and checking account) and M2 (M1 plus time and saving deposits, and foreign currency deposit), hit the lowest 7 per cent in July after gradual slowdown since January, then started increasing slowly after August 1997 (Appendix, Table 3). The slowdown of growth in money supply was caused mainly by the slow growth of foreign currency deposits which consisted of around 95 per cent of commercial bank deposits in Cambodia.

#### ***Financial sector***

The banking system is the only financial market in Cambodia as other financial markets such as for bonds and stocks has not been established yet.

In contrast with the impacts on consumer prices and foreign exchange rates, the internal and external crises had relatively small impacts on the growth of total outstanding credits. The outstanding credits grew by 44 per cent in July compared with the level in previous year (Appendix, Table 3). In addition, the year-on year growth rates changed little, staying between 40 to 50 per cent in the second half of 1997.

Credits to the service sector (construction, wholesales and retail trade, exports, imports finance, real estates, public utilities and other services) accounted for 78 per cent of total commercial bank credits, followed by 18 per cent of the manufacturing sector in December 1997. By contrast, credits to the agriculture sector continued to be low relative to those to other sectors throughout 1997. The agricultural sector received only 4 percent of total credits in December 1997, despite the fact that 75 per cent of Cambodian employed persons are involved in the agricultural sector in 1996. In rural Cambodia a large number of farmers have

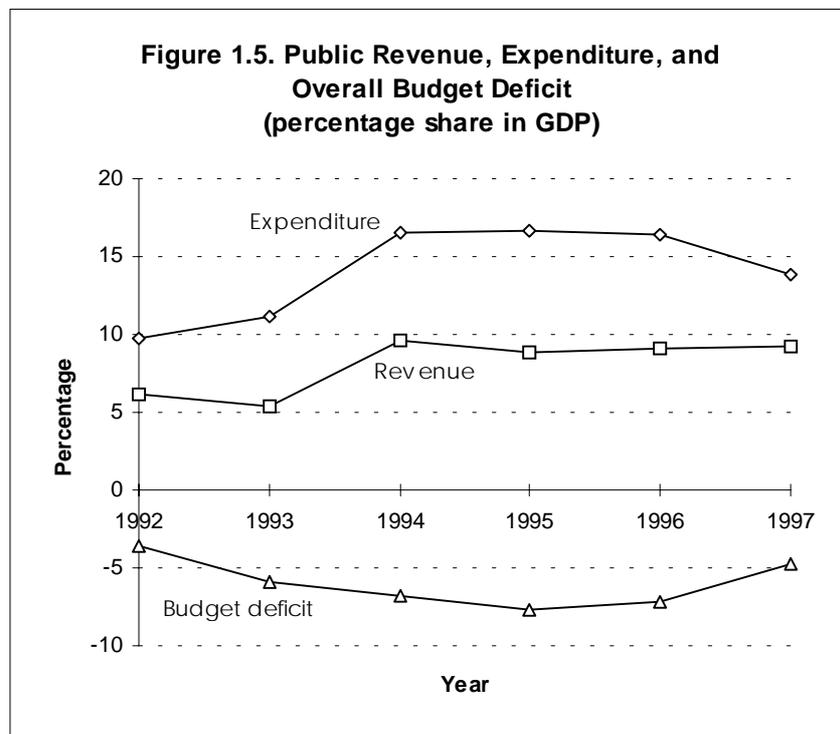
no access to credits, or to informal credits with higher interest rates than the interest rates of commercial banks.

The year-on-year growth rates of total deposits with commercial banks declined from 36 per cent in January to 18 per cent in June (Appendix, Table 3). The growth rates then stayed in single digit levels from July to September, followed by a moderate recovery from 14 to 21 per cent between October and December. The temporary halt of banking operations after July events may have been reflected in the lack of growth of deposits from July to September. A major component of the slowdown was foreign currency deposits whose year-on-year growth rates declined from 37 per cent in January to only 6 per cent in July 1997.

Table 3 in appendix also summarises the structure of deposits with commercial banks in Cambodia. Foreign currency deposits accounted for 95 per cent of total deposits with commercial banks in December 1997. This high percentage share of foreign currency deposits changed little throughout 1997. The efforts of the National Bank of Cambodia to *de-dollarise* the Cambodian economy has not borne fruit since its planning in the late 1995.

#### 1.4 Public Finance

The Cambodian government managed to restore macro-economic stability, with stable rates of inflation and moderate economic growth from 1993 to 1996 (Table 1.3). The government has been, however, dependent on foreign assistance since 1993. From 1994 to 1996, government revenues increased by 26 percent in nominal terms. This increase was largely due to a 46 percent increase in tax revenues, most of which were customs duties. The government also increased total public expenditures by about 26 percent during the same period, while the overall budget deficit as a percentage of GDP was kept within a range between 6 and 8 percent of GDP.



**Table 1.3**  
**Summary of Government Budget 1989 - 1997. Billions of Riels.**

	1989	1990	1991	1992	1993	1994	1995	1996	1997 Budget law	1997	
<b>Revenue</b>	<b>15.3</b>	<b>23.3</b>	<b>58.9</b>	<b>156</b>	<b>290.1</b>	<b>590.4</b>	<b>640.5</b>	<b>746.4</b>	<b>896.6</b>	<b>881.0</b>	
Tax Revenue	6.2	13.3	31.1	109.7	234.1	364.6	445.5	534.5	673.5	597.4	
Of which: Customs Duties			22.0	79.3	172.4	280.9	320.8	344.1	437.8	347.3	
Non - Tax Revenue	9.2	10.0	27.8	46.3	56.0	225.8	196.8	172.7	211.7	271.3	
Capital Revenue								39.2	11.4	12.3	
<b>Expenditure</b>	<b>21.9</b>	<b>50.2</b>	<b>104.2</b>	<b>245.6</b>	<b>608.4</b>	<b>1,019.2</b>	<b>1,200.6</b>	<b>1,280.0</b>	<b>1,480.9</b>	<b>1,319.7</b>	
Current Expenditure	18.5	43.3	99.0	238.5	373.2	683.7	689.5	797.3	870.1	807.8	
Defense & security	7.2	18.7	46.8	118.6	219.4	431.8	425.7	410.5	390.8	440.3	
Other	11.3	24.6	52.2	119.9	153.8	251.9	261.9	373.9	479.3	367.6	
Capital Expenditure	3.5	6.9	5.2	7.1	235.2	335.5	511.1	482.7	610.8	511.8	
<b>Current Deficit (accrual basis)</b>	<b>-3.1</b>	<b>-20.0</b>	<b>-40.1</b>	<b>-82.5</b>	<b>-83.1</b>	<b>-93.3</b>	<b>-49</b>	<b>-50.9</b>	<b>26.5</b>	<b>73.1</b>	
<b>Overall Deficit (accrual basis)</b>	<b>-6.6</b>	<b>-26.9</b>	<b>-45.3</b>	<b>-89.6</b>	<b>-318.3</b>	<b>-428.8</b>	<b>-560.1</b>	<b>-533.6</b>	<b>-584.3</b>	<b>-438.7</b>	
<b>Financing</b>	<b>6.6</b>	<b>26.9</b>	<b>45.3</b>	<b>89.6</b>	<b>318.3</b>	<b>428.8</b>	<b>560.1</b>	<b>557.9</b>	<b>673.1</b>	<b>438.1</b>	
Foreign Financing	2.0	7.2	6.1	1.5	239.1	432.1	559.3	553.4	668.6	505.8	
Domestic Financing	4.6	19.7	39.2	88.1	79.2	-3.2	0.8	4.5	4.5	-67.7	
O/W Bank Financing			14.5	112.8	30.7	-14.3	5.5	7.0	7.0		
<b>GDP</b>	<b>240.9</b>	<b>598.6</b>	<b>1,336</b>	<b>2,509</b>	<b>5,546</b>	<b>6,150</b>	<b>7,200</b>	<b>8,200</b>	<b>9,250</b>	<b>9,250</b>	
					<i>(Percentage of GDP)</i>						
<b>Revenue</b>	<b>6.4</b>	<b>3.9</b>	<b>4.4</b>	<b>6.2</b>	<b>5.2</b>	<b>9.6</b>	<b>8.9</b>	<b>9.1</b>	<b>9.7</b>	<b>9.5</b>	
Tax Revenue	2.6	2.2	2.3	4.4	4.2	5.9	6.2	6.5	7.3	6.5	
Non-tax Revenue	3.8	1.7	2.1	1.8	1.0	3.7	2.7	2.1	2.3	2.9	
<b>Expenditure</b>	<b>9.1</b>	<b>8.4</b>	<b>7.8</b>	<b>9.8</b>	<b>11.0</b>	<b>16.6</b>	<b>16.7</b>	<b>15.6</b>	<b>16.0</b>	<b>14.3</b>	
Current Expenditure	7.7	7.2	7.4	9.5	6.7	11.1	9.6	9.7	9.4	8.7	
Defense	3.0	3.1	3.5	4.7	4.0	7.0	5.9	5.0	4.2	4.8	
Other	4.7	4.1	3.9	4.8	2.8	4.1	3.6	4.6	5.2	4.0	
Capital Expenditure	1.5	1.2	0.4	0.3	4.2	5.5	7.1	5.9	6.6	5.5	
<b>Current Deficit (on accrual basis)</b>	<b>-1.3</b>	<b>-3.3</b>	<b>-3.0</b>	<b>-3.3</b>	<b>-1.5</b>	<b>-1.5</b>	<b>-0.7</b>	<b>-0.6</b>	<b>0.3</b>	<b>0.8</b>	
<b>Overall Deficit (on accrual basis)</b>	<b>-2.7</b>	<b>-4.5</b>	<b>-3.4</b>	<b>-3.6</b>	<b>-5.7</b>	<b>-7.0</b>	<b>-7.8</b>	<b>-6.5</b>	<b>-6.3</b>	<b>-4.7</b>	
<b>Financing</b>	<b>2.7</b>	<b>4.5</b>	<b>3.4</b>	<b>3.6</b>	<b>5.7</b>	<b>7.0</b>	<b>7.8</b>	<b>6.8</b>	<b>7.3</b>	<b>4.7</b>	
Foreign Financing	0.8	1.2	0.5	0.1	4.3	7.0	7.8	6.7	7.2	5.5	
Domestic Financing	1.9	3.3	2.9	3.5	1.4	-0.1	0.0	0.1	0.0	-0.7	
O/W Banking Financing			1.1	4.5	0.6	-0.2	0.1	0.1	0.1		

Source: Bulletin of Statistics (various issues).

Concerns were raised after the crisis of 5 and 6 July 1997 about its effects on national revenues and expenditures. This was primarily related to the possible withdrawal of foreign

assistance, on which the government relied heavily. Another concern was the risk of inflation if the government used monetary financing to pay for the loss of national revenues.

In terms of revenue, the government experienced a 34 percent decline of customs duties in July (Appendix: Table 4). However, the customs revenues went back to more or less previous levels from August, as the security situation improved and port activities resumed normal operations. As a result, national revenue experienced only small fluctuations in the second semester of 1997.

In terms of expenditure, there was a large decline in both capital and current expenditures in July 1997. This reflects a combination of temporary suspension of projects financed by foreign donors, and expenditure cuts of the government. Capital expenditures that were largely funded by foreign donors increased again after September when the majority of foreign donors resumed their operations. The government introduced austerity measures to reduce public spending, foreseeing a shortage of national revenues, which reduced the levels of expenditures in July and August. Total expenditures came back to previous levels after September.

Overall, while there was a sharp decline in government expenditures and revenues in July, the national budget position did not deteriorate greatly in the second half of 1997. Inflation ignited by monetary financing of the budget deficit did not take place during that period.

**Table 1.4**  
**Current Government Expenditure by Sector. Billions of Riels.**

Sector	1995	1996	1997 Budget law	1997	% of total expenditure			
					% of BL 1997	1995	1996	1997
Defense & security	386,5	435,4	424,6	439,7	103,6	57,9	52,6	53,9
Education	73,8	81,3	90,7	80,5	88,8	11,1	9,8	9,9
Health	26,1	44,0	60,7	46,2	76,0	3,9	5,3	5,7
Agriculture & rural development	15,3	18,7	24,4	18,2	74,5	2,3	2,3	2,2
Other ministries	165,4	247,8	269,6	231,3	85,8	24,8	30,0	28,4
Total current expenditure	667,2	827,1	870,0	815,8	93,8	100,0	100,0	100,0

BL: Budget Law

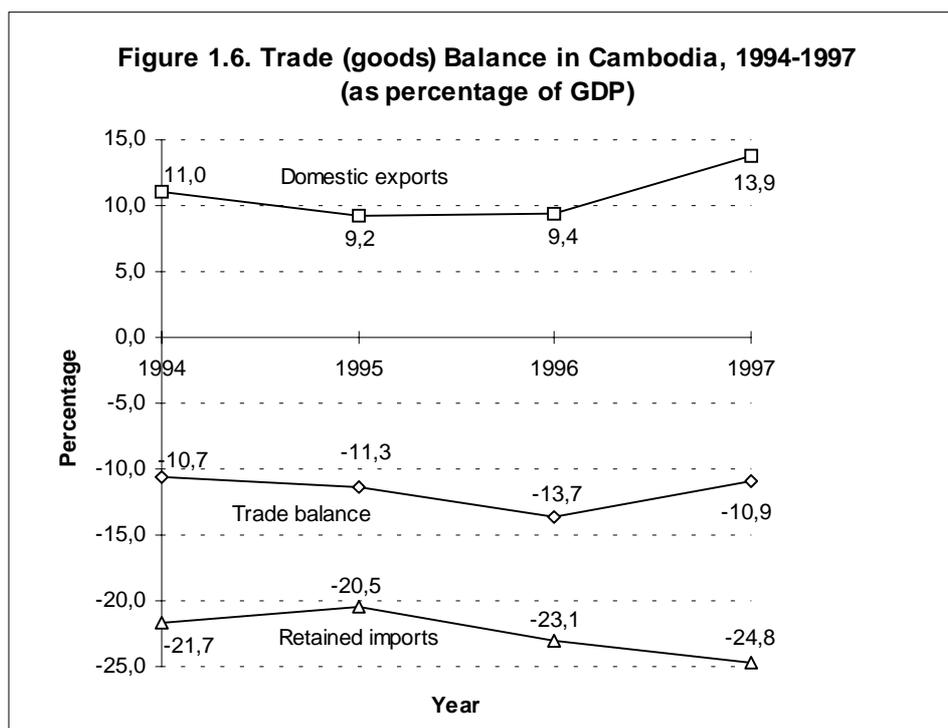
Source: Bulletin of Statistics (various issues).

Total current expenditure actually spent in 1997 was kept at about 94 percent of the level determined by the 1997 Budget Law (Table 1.4). However, expenditure on defence and security overran the 1997 Budget Law level by 4 percent. Expenditure on education, health and agricultural and rural development were most severely affected by austerity measures after the July events, and experienced 10 to 25 percent cuts from the 1997 Budget Law levels.

The composition of public expenditures by sector in 1997 showed little change relative to 1995 and 1996 (Table 1.4). The government failed to achieve its intention in the 1997 Budget Law to expand the proportion of public expenditure on social, agricultural, and rural sectors. Expenditure on security and defence accounted for 54 percent of total expenditure in 1997, while expenditure on education, health, and agriculture and rural development accounted for only 10, 6, and 2 percent, respectively.

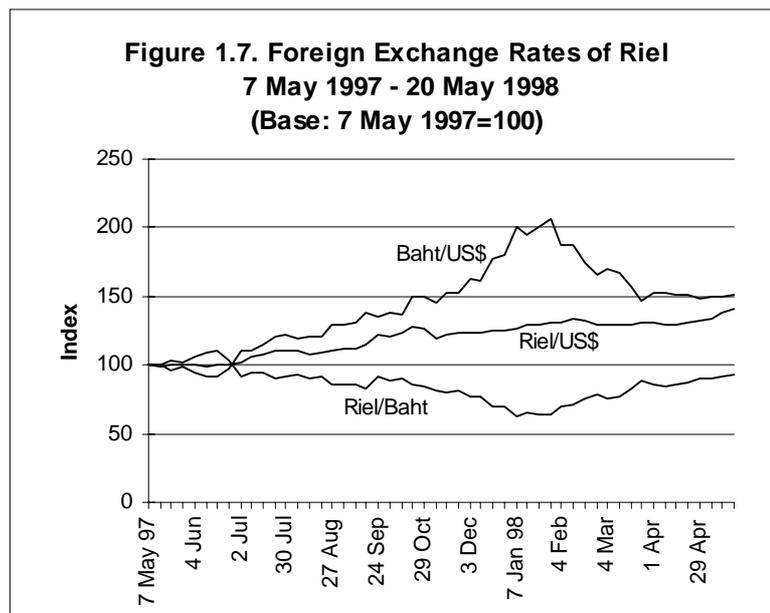
## 1.5 External Transactions

Between 1994 and 1996 Cambodia ran a large trade deficit in goods and services (Figure 1.6, Table 1.5). The trade deficit increased by 41 percent from 340 million USD in 1994 to 480 million USD in 1996. During the same period, total inflow of official transfers in the form of foreign aid and grants, official sector loans and foreign direct investment exceeded the trade deficit. The National Bank of Cambodia therefore increased its net foreign assets by modest amounts from 1994 to 1996.



The two crises in 1997 did not affect export performance of Cambodia, despite the realignment of foreign exchange rates after July 1997 (table 1.5). Domestic exports rose by 49 percent and 35 percent in the third and fourth quarters of 1997 relative to the same quarters in 1996. This was mainly due to the expansion of garment exports to the European Union and the US, which are as yet unaffected by the Asian crisis. By contrast, retained imports increased in the second half of 1997 relative to the previous year.<sup>5</sup> This may reflect the appreciation of the riel and the dollar against regional currencies during this period. The trade deficit in goods and services as a result fell by 26 percent from 480 million USD in 1996 to 356 million USD in 1997.

<sup>5</sup> Retained imports refers to total imports less re-exported imports.



Contrary to the reasonable trade performance after July 1997, official aid, official loans and net private investment all declined in the third and fourth quarters of 1997.<sup>6</sup> This reflects the suspension and withdrawal of foreign aid and loans, and the slump of foreign direct investment. The surplus in the overall balance declined from 72 million USD in 1996 to just 33 million USD in 1997.

<sup>6</sup> For more details, see Grube (1998b).



Source: Data provided by the National Bank of Cambodia.

**Table 1.6**  
**Foreign Investment Projects Approved in Cambodia, 1995 - 1997.**

	Investment projects, no				Registered capital (Million USD)				Fixed assets (Million USD)			
	1995	1996	1997	1998*	1995	1996	1997	1998*	1995	1996	1997	1998*
<b>ASEAN</b>	<b>60</b>	<b>60</b>	<b>47</b>	<b>11</b>	<b>1429</b>	<b>104</b>	<b>76</b>	<b>17</b>	<b>1566</b>	<b>286</b>	<b>111</b>	<b>35</b>
Indonesia	1	6	4	2	2	3	2	1	1	13	1	2
Malaysia	21	25	16	3	1361	54	53	8	1421	191	66	20
Singapore	25	19	17	6	44	35	14	9	108	35	16	14
Thailand	12	10	10	0	23	12	7	0	36	46	27	0
Vietnam	1	0	0	0	0	0	0	0	0	0	0	0
<b>Other Asia &amp; Pacific</b>	<b>61</b>	<b>107</b>	<b>150</b>	<b>36</b>	<b>37</b>	<b>172</b>	<b>193</b>	<b>75</b>	<b>38</b>	<b>251</b>	<b>364</b>	<b>93</b>
China	15	31	31	16	10	23	22	56	6	37	36	69
Hong Kong	12	22	34	8	6	12	18	6	13	26	71	6
Taiwan	19	34	63	8	13	125	48	12	14	164	44	16
Korea	4	7	12	2	4	5	71	2	3	5	189	2
Others	11	13	10	2	3	8	34	0	2	19	23	0
<b>North America</b>	<b>12</b>	<b>7</b>	<b>16</b>	<b>1</b>	<b>46</b>	<b>14</b>	<b>16</b>	<b>0</b>	<b>149</b>	<b>8</b>	<b>97</b>	<b>0</b>
<b>Europé</b>	<b>23</b>	<b>17</b>	<b>20</b>	<b>6</b>	<b>71</b>	<b>67</b>	<b>13</b>	<b>6</b>	<b>213</b>	<b>69</b>	<b>21</b>	<b>7</b>
<b>Middle East</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

\* Quarter 1 (January - March).

Source: CDRI calculations based on data provided by Cambodia Investment Board.

Remark: 'Registered capital' and 'fixed assets' refer to intentions given in the request for project approval. All approved projects may not have been implemented, nor may all intentions with regard to capital and assets have been realised.

The Asian crisis affected the performance by source country/region of investment in Cambodia (Table 1.6). Foreign investment from the ASEAN countries slowed between 1995 and 1997. The registered capital and fixed assets from Malaysia, Singapore and Thailand, which peaked in 1995, drastically declined in 1997. Thailand registered no investment in the first quarter of 1998. By contrast, investment from other countries in the Asia-Pacific region, particularly China, Hong Kong, South Korea and Taiwan, steadily increased from 1995-97.

## 1.6 Labour Markets

According to the Socio-Economic Survey in 1993/94, 75 percent of Cambodia's employed persons were involved in the agricultural sector, 5 percent in the industry sector, and 20 percent in the service sector (Table 1.7, Appendix, Table 5). In particular, the employment in the agricultural sector expanded rapidly between 1993/94 and 1996, and accounted for 78 percent of total employed persons in Cambodia in 1996.

Labour productivity by sector, which was measured by real GDP per employment, are presented in Table 1.7. The indexes of labour productivity reveal the changing pattern of

productivity change by sector. According to the Socio-Economic Surveys in Cambodia, labour productivity declined by 5 percent between 1993/94 and 1996. The productivity decline in the agricultural sector is the largest at 16 percent during that period. This is because the increase in output did not keep pace with the expansion of employed persons (see Chapter 4 which discusses in detail the demographic patterns and labour force characteristics in Cambodia). By contrast, the productivity in the service sector increased by around 20 percent between 1993/94 and 1996, reflecting the high output growth in this sector during this period.

Despite rapid growth of the non-farm sectors in the past few years, its share of the labour force has actually declined (Table 1.7). Thus, agriculture has been forced to serve as an employment buffer, absorbing an unproportionate share of the increase in the labour force. As a result, productivity in agriculture has fallen sharply, which in its turn has led to an overall decline in labour productivity. Thus, it may be concluded that because of its sectoral nature, the GDP growth in the past years is likely to have been inefficient as an instrument for broad-based increases in living standards and reduction in poverty.

**Table 1.7**  
**Labour Productivity by Sector, 1993-1994 and 1996.**

Industry Group and Area	Employment				Real GDP <sup>(1)</sup>		Real GDP per emp.		Index of productivity (1993/94=100)	
	(1,000)				(billion of riels)		(1,000 riels/worker)		(1993/94=100)	
	1993/94	%	1996	%	1993/94	1996	1993/94	1996	1993/94	1996
<b>All industry groups</b>	<b>3,939.8</b>	<b>100</b>	<b>4,858.8</b>	<b>100</b>	<b>298</b>	<b>348</b>	<b>75.6</b>	<b>71.6</b>	<b>100</b>	<b>95</b>
<b>Agricultural sector</b>	<b>2,956.7</b>	<b>75,0</b>	<b>3,797.3</b>	<b>78,2</b>	<b>137</b>	<b>149</b>	<b>46.4</b>	<b>39.1</b>	<b>100</b>	<b>84</b>
Agriculture, hunting, forestry	2,903.0	73,7	3,695.1	76,1	125	136	43.1	36.9	100	86
Fishing	53.7	1,4	102.2	2,1	12	12	221.5	118.4	100	53
<b>Industrial sector</b>	<b>176.0</b>	<b>4,5</b>	<b>230.1</b>	<b>4,7</b>	<b>54</b>	<b>69</b>	<b>304.8</b>	<b>300.7</b>	<b>100</b>	<b>99</b>
Mining and quarrying	6.8	0,2	1.1	0,0	4	5	523.8	4,147.9	100	792
Manufacturing	135.1	3,4	184.0	3,8	21	28	157.7	149.4	100	95
Electricity, gas & water	3.3	0,1	3.6	0,1	1	1	211.7	253.0	100	119
Construction	30.8	0,8	41.5	0,9	28	36	911.8	873.0	100	96
<b>Service sector</b>	<b>807.1</b>	<b>20,5</b>	<b>821.7</b>	<b>16,9</b>	<b>107</b>	<b>130</b>	<b>132.8</b>	<b>158.5</b>	<b>100</b>	<b>119</b>
Trade*	385.7	9,8	430.0	8,8	44	55	112.9	127.0	100	112
Hotels and restaurants	7.3	0,2	7.6	0,2	9	2	1,277.7	2892	100	23
Transport, storage and communications	121.4	3,1	71.2	1,5	2	12	12.8	171.3	100	1341
Real estate, renting and business activities	12.1	0,3	1.2	0,0	20	23	1,619.7	1,911.9	100	1180
Public admin. & defence	148.5	3,8	156.2	3,2	12	13	80.8	81.3	100	101
Other services	132.2	3,4	155.4	3,2	21	26	160.8	164.0	100	102

(1) GDP at 1989 constant prices. The average figures for 1993 and 1994.

Source: Socio-Economic Survey of Cambodia 1993/94 (1995); Socio-Economic Survey of Cambodia 1996 (1997); World Bank (1997).

Labour market indicators suggest that the slowdown of economic growth put pressure on the livelihood of waged employees after July 1997. According to the quarterly labour market survey in Phnom Penh undertaken by the National Institute of Statistics, average monthly real wages peaked in the second quarter, then declined sharply in the third and fourth

quarters of 1997 (Table 1.8). The decline was notable in all sectors, private sector, government services, and international agencies and organisations. Wage employment showed a similar pattern during the same period. The economic slowdown which was precipitated by the July events last year adversely affected the livelihood of wage employees in Phnom Penh. Of interest to note, wage employment in government services steadily increased in 1997, and accounted for more than 54 percent of total wage employment in Phnom Penh in the fourth quarter of 1997.

**Table 1.8**  
**Real Wages and Wage Employment in Phnom Penh.**

	1997		
	Q2	Q3	Q4
<i>Monthly wages at current prices (Base: Q2, 1997 = 100)</i>			
Private sector	100	104	93
Government services	100	102	100
International	100	64	69
Total	100	101	97
<i>Monthly wages at constant prices* (Base: Q2, 1997 = 100)</i>			
Private sector	100	94	82
Government services	100	92	88
International	100	58	60
Total	100	91	85
<i>Wage employment</i>			
Private sector	71,203	57,429	60,062
Government services	65,265	71,074	73,070
Extra-territorial organisations	2,523	3,045	1,781
Total	138,991	131,548	134,913
<i>Percentage of total employment</i>			
Private sector	51	44	45
Government services	47	54	54
Extra-territorial organisations	2	2	1
Total	100	100	100
<i>Wage employment (Base: Q2, 97=100)</i>			
Private sector	100	103	107
Government services	100	105	108
Extra-territorial organisations	100	64	38
Total	100	102	105

\* Constant prices as July-Sept. 1994.

Source: Labour Force Survey (1998).

## 1.7 Sectoral Issues

### *Tourism*

The tourism sector has grown rapidly in recent years and has contributed to foreign currency earnings in Cambodia. For example, the real GDP of hotels and restaurants increased by an annual average of 20 percent between 1993 and 1996. This figure far exceeds the annual average growth rate of real total GDP growth during the same period; - 6 percent. The tourism sector also contributed to an increase in export earnings. Its contribution reached 81 million USD in 1996, about the same amount as the sum of the rubber and log exports that year.<sup>7</sup> The development of the tourism sector also has significant economic impacts on other sectors in Cambodia. It boosts domestic demand for construction, transportation, gas and electricity, the wholesale and retail trade, and even agricultural products.

The tourism sector experienced a remarkable expansion in the first semester of 1997 and a dramatic decline in the second semester. The total number of international arrivals at Pochentong International Airport reached 33,000 in March, the highest figure ever (Appendix, Table 6). By contrast, the number of arrivals declined dramatically from July to December, especially tourist arrivals. As a result, the annual growth rates of total arrivals from the same month in the previous year were all positive between January and June, but negative from July to December 1997.

Losses incurred from the decline in tourism in the second half of 1997 are substantial. If the same number of tourists in 1996 had arrived in 1997, an additional 60,160 tourists would have visited Cambodia during the six months from July to December (Appendix, Table 6). On average, and supposing that each tourist stayed for five days and spend 30 USD for basic needs and 40 USD for accommodation per day, the domestic consumer markets should have earned about 9 million USD and hotels another 12 million USD. If each tourist had also spent 200 USD on gifts, more than 12 million USD could have been spent in domestic markets. In all, Cambodia could have earned additional 33 million USD between July and December 1997. It should be noted that this amount, although just conjecture, does not include direct government revenues such as fees for tourist visas or airport taxes.

Interviews with the Ministry of Tourism and the Hotel Association in December 1997 revealed that of 120 hotels in Phnom Penh as of August 1997, 17 small hotels closed down after the events of July 5 and 6. The interviews also indicate that hotels have been coping with the continuing weak demand by reducing room rates and the working hours of their staff. The government granted an indefinite exemption of the 10 percent hotel tax after July.

### *Garments*

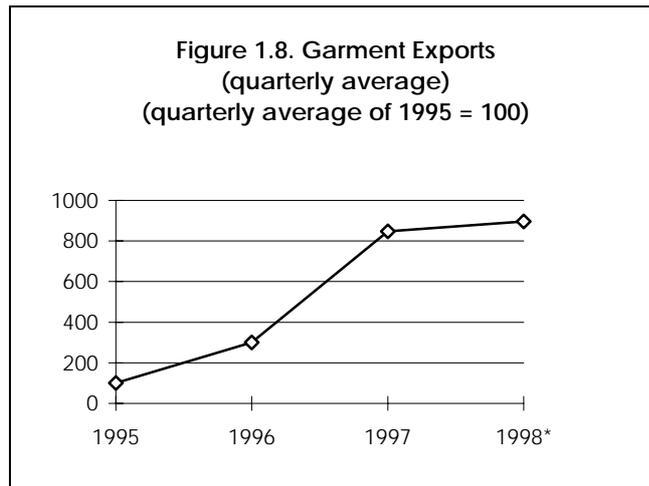
The garment sector in Cambodia showed a notable expansion in 1997. There is no doubt the GSP derogation in July from the EU (local content could be accumulated in ASEAN) and the MFN and GSP status granted from the US stimulated the recent development in this sector.

The expansion was significant in both export and investment. The value of garment exports tripled from 1995 to 1996, and further tripled from 1996 to 1997 (Figure 1.8). The investment projects registered at Cambodia Investment Board (CIB) increased from 27 cases in 1995 to 42 cases in 1996 and 105 cases in 1997 (Figure 1.9).

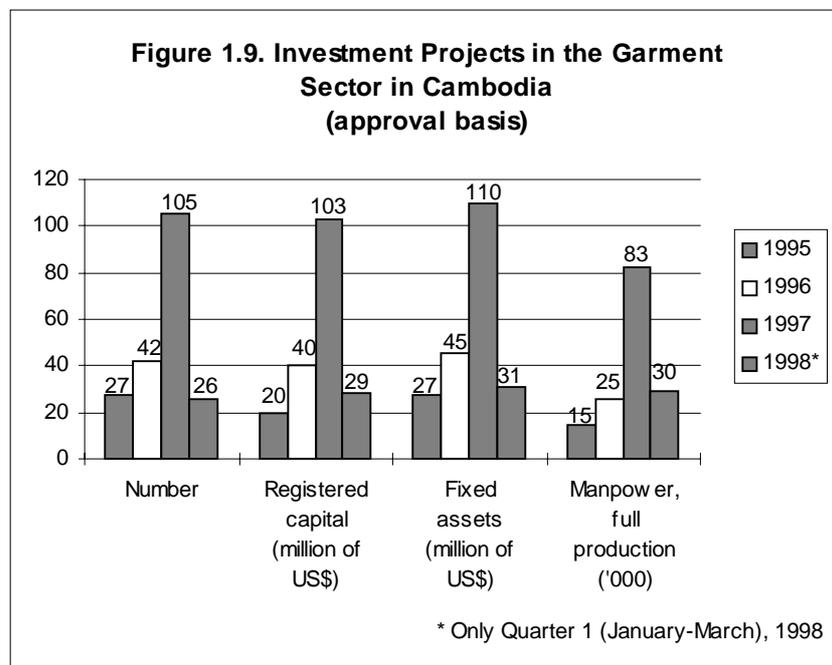
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<sup>7</sup> Godfrey (1997).

While the garment sector created the large number of jobs, particularly for women, some social issues related to the garment sector have emerged in 1997. Frequent strikes were called in 1997 by the garment factory workers who demanded the raise in wages and the compliance of factory owners with the conditions stipulated in the labour laws. There were complaints by factory workers that they had been working over time with the payment which was less than minimum wages. Factory owners complained, on the other hand, that the quality of workers in Cambodia had been lower than those in neighbouring countries, and frequent strikes hindered the timely delivery of their products in the market place.



First quarter only.



*Remark:* 'Registered capital', 'fixed assets' and 'manpower' refers to intentions specified in the request for project approval.

## 1.8 Agricultural Production

With 85 percent of the total population living in rural areas and over 75 percent engaged in farming, agriculture is the basis of Cambodia's rural life. As noted above,

agricultural output alone accounts for nearly half of GDP. However, it has not kept pace with the growth of GDP as a whole and has been volatile due to weather conditions. Given the dominance of rural areas and agriculture in Cambodia, it is as difficult to separate rural development from national development as it is to separate agricultural development from rural development.

### ***Crop Production***

Crop production, in which rice is a major component, makes up about 50 percent of total agricultural output and accounts for nearly 30 percent of GDP. Table 1.9 summarises trends over the past few years.

**Table 1.9**  
**Cultivated Areas and Production of Main Crops (1993-97).**

	1993/94	1994/95	1995/96	1996/97	1997/98
	<i>Cultivated area ('000 hectares)</i>				
Rice	1,857	1,924	2,086	2,171	2,076
Maize	43	52	52	49	52
Vegetables	30	35	42	46	44
Mung Bean	21	27	26	28	27
Soya Bean	16	25	17	29	33
Sesame	10	11	9	12	17
Groundnuts	7	8	10	12	10
	<i>Total production ('000 tons)</i>				
Rice	2,383	2,223	3,448	3,458	3,415
Corn	45	45	55	64	67
Vegetables	227	197	193	249	250
Mung Bean	10	17	20	14	15
Soya Bean	13	23	17	28	34
Sesame	5	4	4	5	7
Groundnuts	5	5	7	6	5

*Source:* Agricultural Statistics (various issues).

*Remark:* Figures based on 'harvest years', e.g. June - May.

### ***Rice***

Although rice cultivation dominates agricultural activities, it is still based on traditional methods and is dependent on rainfall. Slightly more than two million hectares of land were estimated to be under rice cultivation in 1997, compared with 2.5 million in 1967. The average yield was 1.64 tons per hectare, compared with only 1.28 tons in 1993.<sup>8</sup> This yield is, however, still the lowest in the region, and compares unfavourably with the two to three tonnes per hectare obtained in other countries. The fluctuation of rice yields is largely due to fluctuation in rainfall, and to floods and droughts. The effect of such calamities is reflected in the differences between cultivated and harvested areas -- 161,950 hectares in 1995, 291,900 hectares in 1996, and 147,322 hectares in 1997 (Table 1.11). Thus hundreds of thousand extra tons of rice per annum could have been harvested in the last few years, if there had been no damage (Table 1.12).

<sup>8</sup> Yields are calculated as production per unit of cultivated area.

**Table 1.10**  
**Yields of Major Crops by Country in the Region 1994/95 (tonnes/hectare).**

	Cambodia	Laos	Myanmar	Vietnam	Thailand	Malaysia	Philippines	Indonesia
Rice Paddy	1.5	2.7	3.1	3.6	2.3	3.1	2.7	4.3
Corn	1.7	2.2	1.7	2.2	2.8	1.8	1.5	2.3
Soybean	2.2	0.9	0.8	1.0	1.4	0.3	1.3	1.1
Cassava	6.0	13.7	9.3	8.9	14.0	10.5	8.7	12.2
Sweet potatoes	6.0	7.7	5.5	6.1	10.1	11.0	4.8	9.5
Potatoes	-	6.7	9.4	9.6	9.3	-	13.4	15.6
Groundnuts in shell	0.6	0.9	1.0	1.2	1.5	3.7	0.8	1.3
Sugar Cane	33.3	29.9	41.0	49.7	54.8	68.0	66.8	74.7

*Source:* FAO (1996).

*Remark:* Yield apparently calculated as production per unit of harvested area.

Only 16 percent of paddy land is irrigated; the rest is rainfed. Farmers are very reliant on weather conditions, which have become increasingly difficult to predict from year to year, in an increasingly degraded environment. This is not necessarily the result of lack of water sources, but rather the lack of means to exploit them<sup>9</sup>. Thus a considerable percentage of all kinds of crops were damaged (Tables 1.11 and 1.12). The inability to gain access to sufficient water also appears to have discouraged farmers from making greater use of abundant land.

Almost all rice cultivation takes place only once per year, either on high land or low land. The high land, which represented nearly 90 percent of total rice-cultivated land in 1997, is cultivated during the rainy season. The variety grown is commonly monsoon-season rice which takes about 5 to 7 months to be harvested and is highly prone to floods and droughts. The average yield has been 1.7 ton per hectare or below in the past five years. After harvest, this land is made available to animals until the next rainy season comes, although a small proportion is used for growing other crops such as water melons, pumpkins and cucumbers. Given the altitude of this land, it is perhaps too costly to install irrigation systems that use water from the main rivers. However, underground water does not seem to have been exploited yet for irrigating these highland farms.

The lowland farms, which account for only about 10 percent of total rice-cultivated area, is flooded annually by the rise of the Mekong in the rainy season. The high-yielding varieties developed by the International Rice Research Institute (IRRI) are commonly grown on this lowland. Because of the better fertility due to annual build up of sediment from the Mekong and other rivers, plus the convenient availability of water sources, the average yield of this water recession rice has been as high as 3.0 tons per hectare in the past four years.

<sup>9</sup> A CDRI Cross Country Study shows that fresh water resources per capita in 1995 was of the largest among the countries in the region, but annual use of fresh water.

**Table 1.11**  
**Damaged Areas: Cultivated Areas Minus Harvested Areas (hectares).**  
 Figures in parentheses are percentage of cultivated areas.

	1993/94		1994/95		1995/96		1996/97		1997/98	
Rice	32,935	(1.8)	429,400	(22.3)	161,950	(7.8)	291,900	(13.4)	147,322	(7.1)
Corn	393	(0.9)	15,000	(28.8)	6,545	(12.7)	2,425	(4.9)	2,850	(5.5)
Vegetables	732	(2.5)	1,000	(2.9)	2,450	(5.9)	4,124	(9.0)	1,100	(2.5)
Mung Bean	190	(0.9)	1,000	(3.7)	430	(1.7)	1,287	(4.6)	850	(3.2)
Soya Bean	2,093	(12.8)	3,000	(12.0)	360	(2.2)	77	(3.7)	1,000	(3.3)
Sesame	302	(2.9)	2,000	(18.2)	360	(4.2)	563	(4.6)	1,050	(6.2)
Groundnuts	190	(2.6)	1,000	(12.5)	900	(9.1)	632	(5.3)	300	(3.1)
All crops	36,835	(1.9)	452,400	(12.7)	172,995	(7.7)	301,008	(12.8)	154,472	(6.8)

*Source:* Agricultural Statistics (various issues).

*Remark:* Figures based on 'harvest year', e.g. June - May.

The reasons why the IRRI varieties are not preferred for the high land include the fact that these varieties in general require careful water control and are less resistant to the monsoon conditions prevailing in Cambodia. Thus sufficient water supply would be needed for farmers to grow the high yielding varieties on the highland farms.

**Table 1.12.**  
**Crop Production Losses, 1993-1997 (tonnes).**  
 Figures in parentheses are percentage of production

	1993/94		1994/95		1995/96		1996/97		1997/98	
Rice	43,044	(1.8)	638,808	(28.7)	290,210	(8.4)	537,195	(15.5)	260,847	(7.6)
Corn	416	(0.9)	18,243	(40.5)	7,979	(14.5)	3,316	(5.2)	3,913	(5.8)
Vegetables	6,728	(2.5)	5,794	(2.9)	12,063	(6.3)	24,586	(9.8)	6,410	(2.6)
Mung Bean	99	(0.9)	654	(3.8)	334	(1.7)	662	(4.8)	490	(3.3)
Soya Bean	1,883	(14.6)	3,136	(13.6)	384	(2.2)	1,090	(3.9)	1,063	(3.1)
Sesame	141	(3.0)	889	(22.2)	163	(4.3)	253	(4.8)	429	(6.6)
Groundnuts	131	(2.7)	714	(14.3)	675	(10.0)	347	(5.6)	188	(3.2)
All crops	52,443	(1.9)	668,239	(26.6)	311,808	(8.3)	567,448	(14.8)	273,340	(7.2)

*Source:* Agricultural Statistics (various issues).

*Remark:* Figures based on 'harvest year', e.g. June - May.

### *Other crops*

Beside the staple rice, considerable amounts of corn, vegetables, mung bean, soy bean, cassava, sweet potato, sugarcane, sesame and groundnuts are cultivated in rural Cambodia. Small amounts of these crops are grown on paddy fields after rice is harvested but the rest are planted on different land. Cultivation of the non-rice crops are still at the household scale, although it is the primary source of incomes for many households.

As can be seen in Table 1.10, the non-rice crops cover about 10 percent of some two million hectares of crop cultivated land. These crops are largely for domestic consumption,

which significantly contributes to the nutritional improvement of the local diet. In addition, several thousand tons of each of soy bean, mung bean and yellow corn were exported annually from 1986 to 1990. Of interest to note is that the yield of soybean in Cambodia is the highest among countries in the region (see Table 1.10). It seems that Cambodia has a comparative advantage in soybean production, which offers a potential since soybean is increasingly consumed worldwide in the form of processed drink and food.

Any attempt to diversify crop cultivation will be to produce non-rice crops which seem to have great potential markets and production base. Given the abundant land and labour, the potential to intensify non-rice crops is considerable. However, it is critical that this potential is realised by increased access to markets, especially the international market. Furthermore, to increase the demand for grain output there is a need for expansion of grain-processing enterprises in Cambodia. At present, Cambodia is a large net importer of processed grain from the region.

### ***Fruit Trees***

Like vegetables, fruit trees are usually grown in the home gardens of almost every rural household for own consumption, and to supplement incomes if any surplus is produced. Despite the fact that Cambodia is located in the tropical zone, as are Thailand and Vietnam, Cambodia imports a great amount of fruits that can be grown locally from the latter countries. This may reflect the neglect of this sub-sector, which needs to be developed to the commercial cultivation of fruit trees. As for all crop production, lack of the means to provide sufficient water appears to be the main obstacle.

### ***Livestock and Poultry***

Animal husbandry is still at a small scale, although it has contributed about 14 percent to GDP in the past few years. Almost every rural household raises a couple of cattle, one or two pigs and a few poultry for production means and as a source of protein or asset accumulation. The risks of production are high since animal health care is still poor.

**Table 1.13**  
**Livestock and Poultry Production 1993-97.**

	1993	1994	1995	1996	1997
	<i>1,000 heads</i>				
Cows and oxen	2,527	2,622	2,778	2,762	2,872
Buffaloes	824	814	765	744	766
Pigs	1,992	2,002	2,039	2,151	2,237
Poultry	9,465	10,094	10,067	11,412	11,982
	<i>% Change from previous Year</i>				
Cows and oxen		3.8	5.9	-0.6	4.0
Buffaloes		-1.2	-6.0	-2.7	3.0
Pigs		0.5	1.8	5.5	4.0
Poultry		6.6	-0.3	13.4	5.0

*Source:* Agricultural Statistics (various issues).

Cows, oxen and buffaloes are raised primarily for ploughing and raking crop farms and for meat consumption when they get too old to undertake these farming tasks. Breeding these animals is also a way of accumulating and storing assets. Therefore, a large proportion

of rural inhabitants raise a pair or so per household. There does not appear to be any cattle farming larger than this scale.

Likewise, pigs and poultry, mainly chickens, are kept by almost every household for meat and egg consumption and to supplement incomes. Since the early 1990s, there has been a considerable amount of commercial farming of chickens as part of foreign investment from Thailand and other countries. However, these chickens are not enjoyed by the Cambodians due to their different taste, which is considered to be too soft, although they are cheaper than the local free ranging chickens owned by households.

Animal health care appears to be the main problem of this household-scale animal production. With very limited access to veterinary and extension services, households normally suffer from death of their livestock and poultry resulting from diseases. Poor households who have obtained credit from NGOs to invest in raising pigs have been hurt financially by the death of their animals. This high risk of animal death seem to have made the household-scale animal raising inefficient and discouraged farmers from expanding this secondary business. As Table 1.13 illustrates, livestock and poultry production has not increased significantly in the past few years.

## **Chapter Two**

### **The Impacts of the Internal and External Crises**

The event of July 1997 was precipitated by the conflicts between two major political parties, and changed fundamental conditions for domestic economic activity in Cambodia. The Asian crisis since July 1997 dramatically changed the external economic environment surrounding Cambodia. This chapter is largely based on the results of a series of field studies undertaken by CDRI to investigate the impacts of the twin crises on Cambodia. The field studies include five market surveys from July 1997 to May 1998, and interviews with enterprises conducted in February and May in 1998.

#### **2.1 The Impacts on Consumer Prices and Spending**

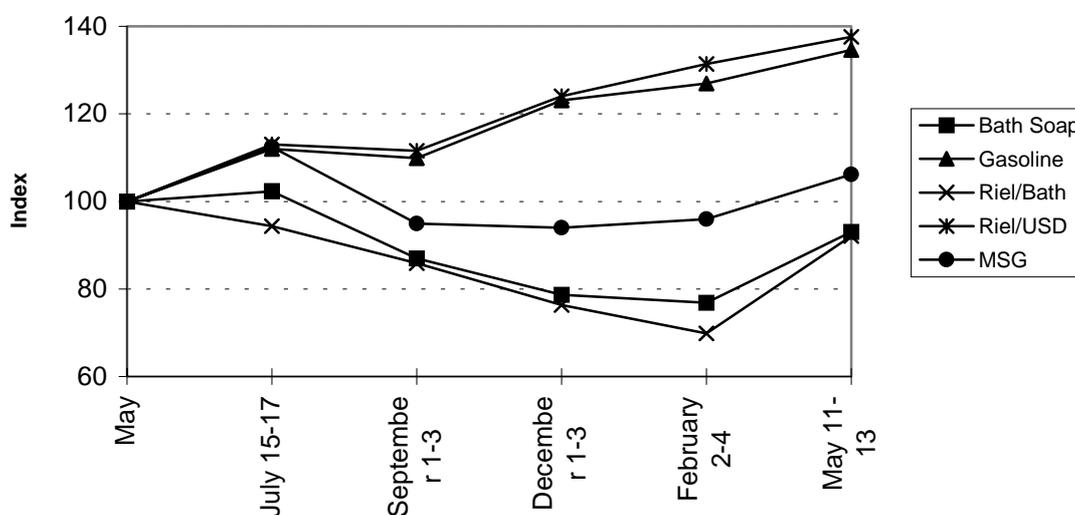
CDRI undertook five market surveys between July 1997 to May 1998. Vendors in five major markets in Phnom Penh - Olympic, Thmei (new), Toul Fumpong (Russian), O'Russeï and Chbar Ampeou - were asked about prices of and expenditures on various consumer goods and services. Prices were collected for 20 items deemed essential for daily life in Cambodia (Appendix, Table 7), and twenty price samples were taken for each item. Market vendors were interviewed about the volume of their sales and the amount of their earnings to assess domestic consumption spending. Attempts were also made in the surveys to investigate how the fluctuations in foreign exchange rates of the regional currencies had affected Phnom Penh markets.

The small sample size (around 130 vendors) and limited geographical coverage mean that the results cannot be extrapolated to the national level. However, with no similar surveys currently available in Cambodia, these provide the primary source of information about consumer prices and demand, and related economic activity in Phnom Penh.

#### ***Price Changes***

Consumer prices of twenty essential items increased sharply after the events of 5 and 6 July 1997, according to the first market survey undertaken in 15-17 July 1997 (Appendix, Table 7). The second survey in 1-3 September found, however, that people's economic activities came back to be normal after a month and a half. During this period, the prices of domestically produced products, which consist of a large proportion of the twenty items, became more or less stabilised. The third and fourth surveys found that the prices of these domestic products continued to be stable until February 1998 with some seasonal fluctuations.

**Figure 2.1. Changes of Import Prices and Foreign Exchange Rates:  
May 1997 - May 1998  
(Base: May 1997 = 100)**



By contrast, the prices of imported products fluctuated more than those of domestic products since July 1997. This was primarily due to the exchange rate fluctuations precipitated by the July events and the financial crisis in Asia. Among the essential twenty items in the surveys, MSG, sarong, and soap are imported from Thailand, and are priced in Thai baht in Phnom Penh markets. The prices of MSG and soap in Cambodia riels declined from July 1997 to February 1998, then went up again in May 1998 (Appendix, Table 7). As Figure 2.1 illustrates, the decline of the prices of these imported items was closely correlated with the appreciation and subsequent depreciation of Cambodia riels against the Thai baht between July 1997 and May 1998. The other imported items, gasoline and kerosene, are usually priced in US dollars. The prices of these products were again closely associated with the fluctuations of Cambodia riels against the US dollar (Figure 2.1).

The most recent survey in May found a considerable increase in the prices of 20 essential items since the previous survey in February. Between February and May 1998, inflation (affecting both local and imported products) accelerated to 7.3 percent, and the year-on-year rate rose to 13 percent, the highest figure since the market surveys started (Appendix, Table 7).

The extraordinarily hot weather in the first half of 1998 appears to have put upward pressure on prices of food items, which tend to increase in the dry season anyway when the supply of local food declines. For instance, the prices of fish, vegetables, bananas and palm sugar rose significantly, relative to February and the same month last year. Vendors confirmed that the quantity supplied this year was lower than last year.

### *Soaring Rice Prices*

The May survey in 1998 found the price of rice soaring, as has also been reported in the press. The prices of all varieties were found to be higher than those before April 1998, though the extent and causes of the increase were not all the same. A majority of vendors

reported that people responded to the rapid increase in the price of rice by reducing their non-food expenditures.

The increase in the price of rice is a major concern in Cambodia, as rice consumption accounts for 80 percent of calorie intake in the rural diet, and 38 to 50 percent of household food expenditure in rural areas.

Rice wholesalers interviewed said that a large proportion of the rice they sold came from Battambang. Our interviews found three reasons for the recent rise in the price of Battambang rice. First, it is priced in baht, and traders in Battambang accepted only baht or dollars for payment. Thus, the riel price of Battambang rice at the retail level had to be raised because of the riel's depreciation against the baht. Second, wholesalers reported that traders in Battambang had raised the price in baht by 18 percent since April. Third, border traders from Thailand reportedly offered a higher price to import the rice into Thailand.

The price of rice from eastern provinces in Cambodia, appears to have increased for a different reason, according to wholesalers interviewed in Phnom Penh. Vietnamese traders are said to have been willing to buy the rice from eastern provinces at higher prices in riels than local traders. The high demand from Vietnam (due to droughts in Vietnam and the export of Vietnamese rice to Malaysia and Indonesia) pushed up the price by about 30 percent within less than a month following Khmer New Year.

According to the Ministry of Agriculture, Forestry and Fisheries, rice output in the 1998 dry season was 43,321 tons more than the comparable figure for 1997. However, total rice production in the 1997 wet season, primarily for 1998 consumption, was 731,403 tons down on the previous year. Furthermore, while the irrigated rice output does not appear to have been affected by the hot weather, this year's rain-fed rice production (which accounts for 80 percent of the total) is likely to have been hit.

According to wholesalers, the increase in rice prices appears to be associated with widespread hoarding of rice for consumption and speculative profit, due to fears of insecurity during and after the elections and of rice shortages resulting from the hot weather.

### *Consumer Spending*

Consumer spending declined sharply after the July events in 1997. The second market survey undertaken in September 1997 revealed that, among around 130 vendors interviewed, 95 percent of the vendors reported that their sales had been less than the pre-July level, their average amount of sales were 40 percent of pre-July level, and only 23 percent of vendors said their earnings had been enough to cover their daily expense (Table 2.1). It was reported that the adverse impacts of the July events were particularly severe for those vendors selling items such as non-food and durable goods (Table 2.1). While there were some indications of recovery, notably in food items, the weak demand for consumer goods and services persisted in the third and fourth surveys in December 1997 and February 1998, respectively (Table 2.1).

The most recent survey in May 1998 found that on average, vendors were selling 48 percent of the amount they used to sell before the events of 5 and 6 July 1998, compared with the 54 percent reported in February 1998 (Table 2.1). While 98 percent of the vendors interviewed reported that their sales were lower than those of the pre-July level, 58 percent said they could earn enough for their daily expenditure. Almost every vendor complained that competition was tougher and that their net profit had become very small in the face of the current weak demand.

The main reasons given for low sales were: (1) the generally weak demand for consumption and investment since the twin crises erupted in July 1997; (2) a big reduction in

the number of tourists; (3) a regular low expenditure season following Khmer New Year; (4) increased import prices due to the depreciation of the riel; and (5) the uncertain prospects for security after the elections.

**Table 2.1**  
**Amount of Sales and Earnings of Vendors in Five Major Markets in Phnom Penh,**  
**1-3 September 1997, 1-3 December 1997, 2-4 February 1998 and 11-13 May 1998.**

**Questions to vendors**

- Q1. Is the amount of your sales [more than, the same as, less than] that before 5 and 6 July?*  
*Q2. If less, what percentage are current sales relative to those before 5 and 6 July?*  
*Q3. Are you earning enough money to cover your daily expenses?*

Type of Products	Q1. Percentage of vendors who reported selling less				Q2. Average amount of sales as a percentage of those before 5 and 6 July				Q3. Percentage of vendors who reported earning enough			
	II*	III	IV	V	II	III	IV	V	II	III	IV	V
All items	95	90	87	98	40	47	54	48	23	52	68	58
Non-food items	100	95	92	99	34	40	48	45	16	44	60	49
Durable items	100	96	95	100	33	38	46	43	6	43	53	45
Luxury items**	100	100	100	100	24	30	36	45	0	30	29	47
Household and utility items***	100	94	82	100	40	43	54	44	21	53	75	60
Clothing, shoes, bags	100	95	100	100	32	40	46	42	0	43	57	37
Non-durable items and services	87	91	91	93	36	46	56	54	44	36	81	67
Food items	92	81	80	98	44	59	61	54	33	67	80	76

- \* II indicates the second market survey (1-3 September), III the third survey (1-3 December), IV the fourth survey (2-4 February), and V the fifth survey (11-13 May, 1998).  
 \*\* Luxury items include precious stones, gems, gold, jewellery, televisions, cassette players, watches, video tapes, gifts etc.  
 \*\*\* Household and utility items include kitchenware, plastic containers, blankets, mosquito nets, construction materials, electrical appliances, motorcycle spare parts etc.

***Transaction with provincial traders***

Little information is available regarding consumer spending in provincial markets in Cambodia. Our interviews with vendors in Phnom Penh, however, revealed some indications regarding the impacts of the crises on provincial markets in Cambodia. This is because Phnom Penh vendors sell their goods not only to consumers in Phnom Penh but also to provincial traders who come and buy goods in Phnom Penh and then sell them on in provincial markets.

The CDRI market surveys revealed that the economic slowdown after the events of July influenced both the volume of transactions and the payment schemes with provincial traders.

As far as the volume is concerned, many vendors in the Phnom Penh markets reported in December 1997 that their provincial traders had resumed their business after a few months of temporary suspension. However, provincial traders reduced either the amount of their purchases or their number of visits to Phnom Penh, reflecting the weak demand for goods in the provinces. With regard to payment schemes, the bulk of payment used to be made after the provincial traders sold their goods in provinces, allowing *de facto* credit for the provincial traders. After July, however, most vendors in Phnom Penh began to ask for immediate

payments in exchange for goods. This was because they perceived a higher risk in delayed payments as the volume of future revenues became less certain due to the depreciation of the baht and riel. Vendors were also concerned about the general security situation, and in some cases needed cash for their own expenses.

### ***Impact of the realignment of foreign exchange rates in the region***

Market surveys in December 1997 and February 1998 found that the rapid depreciation of the regional currencies, particularly the baht, resulted in a substantial decrease in the dollar- and riel-denominated prices of products imported from the region, thus raising the competitiveness of foreign and especially Thai products. Since most non-food products sold in Phnom Penh markets were imported, consumers enjoyed “benefits” from the Asian crisis in the form of cheaper imported products.

The surveys also found that consumers had not benefited fully from the appreciation of the dollar and the riel against the baht. This is because the baht prices of some Thai products increased after July 1997. All the retailers interviewed reported in February 1998 that their wholesalers had charged higher prices in baht for some products. They also reported that they had had to pay higher baht prices to Thai distributors. The extent of the increase in baht prices, however, varied considerably depending on the types of products. For instance, the price of construction materials, fishing nets, bedding and suitcases increased about 5 percent, while the price of shoes, clothes, groceries, kitchenware and stationery increased between 10 to 30 percent.

The depreciation of the baht from July 1997 to January 1998 made Thai products more competitive than products imported from other countries. Interviews were conducted in February 1998 with two motor cycle companies: one selling the Suzuki brand imported from Thailand, and another selling the Yamaha brand imported from Japan. The depreciation of the baht enabled Suzuki to lower the price of its top range motorcycle from 1,700 USD to 1,200 USD, and it trebled the number sold. Sales of Yamaha motorcycles fell by 60 percent, because the dollar-denominated prices remained at their pre-July level due to the stability of the Japanese yen against the dollar.

The market survey undertaken in May 1998 found some evidences that consumer benefits from the exchange rate realignment were short-lived. Due to the relative strengthening of the baht after February 1998, the riel-denominated prices of most imported products had risen to more or less their pre-July levels. Some Thai products were more expensive even than their pre-July level after the riel-baht exchange rate came back to its pre-July level.

The increase in baht prices coupled with the rapid depreciation of the riel suppressed the recovery of sales and fuelled inflation, according to the vendors. The riel-denominated prices of imported products from Vietnam, China, Singapore, Malaysia and Western countries were found to be higher than their pre-July level, though lower in terms of dollars. This is again because the depreciation of those countries’ currencies against the dollar was far less than that of the riel.

## **2.2 Impact on Some Enterprises**

Interviews were also conducted in February and May 1998 with enterprises and retailers to investigate the impact of the crises on Cambodian industry. The interviews covered

the following industries: garment, wood and wood-processing, cement, breweries, milk, and plastics. The first two are major export-oriented industries, while the other four are import-competing. Questions concerned changes in output, input prices, wage payments, transactions, and the difficulties facing the factories. The small size and geographical limitations of our sample should be borne in mind.

### ***Export-oriented enterprises***

#### *Garment*

Interviews with the Cambodian Garment Association and two garment factories in May 1998 revealed that the realignment of foreign exchange rates had a mixed impact on the garment sector. On the one hand, the depreciation of currencies in countries affected by the crisis reduced their dollar-denominated labour costs. This made Cambodia's labour costs relatively high and reduced its competitiveness within the region. On the other hand, some factories must have enjoyed cheaper imports of inputs from the crisis countries during the period in which regional currencies were weakening.

The slowdown in economic growth in the region has had little effect on the performance of the garment sector in Cambodia. Total garment exports increased by 183 percent from 79 million USD in 1996 to 224 million USD in 1997, according to the Ministry of Commerce. Investment projects in the garment industry increased significantly during the second semester of 1997, even though some factories were destroyed or looted following the fighting in July 1997. A major reason, of course, is Cambodia's MFN and GSP status obtained from the European Union and the United States. The EU and US markets have been little affected by the Asian crisis so far, though garment factories reported that their clients in the European Union and the United States had hesitated to send orders because of concerns about timely delivery during the election period.

#### *Wood-related enterprises*

Interviews with two enterprises producing and exporting sawn timber and one producer of veneer for export revealed that they had been severely affected by the financial crisis in Asia. The first adverse impact was from the decline of timber prices—the price of second grade timber dropped from 350 USD per cubic metre before July 1997 to only 150 USD in May 1998.

The second adverse impact was the decline in demand for Cambodian sawn timber, which partly reflected the liquidity problems of importers in the crisis countries in the region. Thai importers reportedly could no longer borrow money from their banks for imports.

The decline in regional demand forced all three companies to scale down their activities. One company laid off two-thirds of its 900 workers in May 1998. Another, exporting sawn timber to Thailand and employing about 100 workers, reported that it would go bankrupt soon because of the recent decline in demand.

### ***Import-competing enterprises***

#### *Cement*

One Cambodian cement company reported adverse effects from price competition from cheap imported cement, especially from Thailand. Due to the depreciation of the baht, the price of Thai cement fell to around 72 USD per ton in February 1997 from 105 USD per

ton a year ago. The company was forced to reduce the price of its domestic cement from 90 USD to 65 USD per ton during that period. When the baht bounced back against the dollar from January 1998, the price of Thai cement started to increase again, and reached 75 USD per ton in May, allowing an increase in the price of domestic cement to 70 USD.

In February 1998, in response to lobbying from some companies, the government issued a sub-decree to increase import tariffs on cement from 7 to 15 percent. The sub-decree has not appeared to help domestic producers as intended. One company reported that Thai cement was still sold cheaply in Phnom Penh markets. It was not clear whether the sub-decree had not been implemented or whether cement-importing companies had avoided paying the import tariff.

One company adopted a coping strategy to reduce production costs, cutting out its intermediate production process of extracting domestic limestone for making cement. Instead, the company imported clinker (a semi-finished product) from Thailand. Although the strategy has helped the company to survive, it is likely to have an adverse impact on employment.

### *Breweries*

Domestic breweries also had been affected by price competition from imported beer, particularly from Thailand. As a coping strategy, one brewery launched a new product which was 30 percent cheaper than its original brand. According to interviews with retail shops in Phnom Penh, the new and cheaper brand had been gradually increasing its market share.

The crisis appears to have led to increased smuggling across the Thai border. Thai beer was smuggled into Cambodia, and sold at around 11 USD per case early this year, compared with 17 USD a year ago. One Cambodian brewery reported that it had been completely eliminated from the market in two of the provinces bordering Thailand, Battambang and Banteay Meanchey. Its total sales declined by 50 percent (from the previous year) in the second half of 1997. In the first quarter of 1998, however, its sales revived somewhat, to about 60 percent of year-earlier levels.

### *Soft drinks*

The Asian crisis affected soft drink producers in Cambodia as imported brands became relatively cheap due to the weakening of regional currencies. Almost all respondents who were selling soft drinks in grocery shops said that there had been a large demand for Thai soft drinks during the Chinese New year when the Thai baht weakened the most against the US dollar. After February, however, locally produced soft drinks gradually increased their market shares again because the Thai Baht bounced back and inflation picked up in Thailand.

### *Condensed Milk*

Our interviews found that the Asian crisis had adversely affected a condensed milk producer in Cambodia. The factory reported that the price of white sugar, an essential raw material, imported from Thailand had actually gone up by 60-80 percent in US dollar terms in February 1998. They explained that this was because of emergency policy measures by the Thai government to restrict the exports of white sugar, considered an essential food item. In addition, the company had to cut their wholesale prices to maintain their market share. Notwithstanding the efforts to compete with imported products, the sales of the domestic brand are reported to have slumped since the July events last year.

To cope with the situation, the local producer interviewed sold 80 percent of shareholdings in December 1997 to a foreign dairy company from Switzerland. In February 1998 interviews the company had complained that discretionary concessions of import tariffs

and smuggling had made it difficult to compete with imported products, expressing the view that all companies in the market place should be treated equally and fairly.

#### *Plastic producers*

A Cambodian plastic producer established in 1994 was closed in late February 1998 due to the loss of competitiveness against imported plastic products after the Asian crisis had erupted, according to the interviews with a board member of the company. Although the factory survived for a few months after the Asian crisis started, it could no longer continue its operation as the company faced competition from imported plastic products.

### **2.3. Pressures on the Livelihood of Vulnerable Workers**

As a further monitoring effort, a pilot survey of vulnerable workers in Phnom Penh was carried out from 12 to 15 May 1998. A sample of 80 workers was interviewed, 20 from each of four occupational groups - porters, cyclo drivers, small traders (in vegetables) and scavengers. Interviewees were asked about their gross and net earnings and the number of days worked now compared with early January ("before Chinese New Year") and with the period before July 1997. Given the small size of the sample and the inherent problems of sampling people in these kinds of occupation, there are obvious limitations.

The main finding of the survey is that the net daily earnings of these vulnerable workers has fallen catastrophically over the past year, and that the fall that began after the events of July 1997 has shown no signs of abating during 1998.<sup>10</sup> Table 2.2 shows the net daily earnings reported by respondents in each of the three periods covered by the survey, and the percentage changes between periods.

Small traders suffered the largest percentage fall in earnings, and scavengers the smallest. Both now earn the equivalent of less than one dollar a day. Cyclo drivers still have the highest earnings of the four groups. It should be remembered also that these are nominal earnings. The purchasing power of these earnings has fallen even more as a result of the increase in food prices, especially rice. There have been no significant changes in the average number of days worked, except in the case of porters, who worked 22 days per month before July 1997 and less than 19 in the two more recent periods; scavengers and traders still work every day, and cyclo drivers around 25 days a month.

Cyclo drivers attribute the deterioration in their situation to the fall in the number of tourists and foreign residents, the lower level of economic activity and increased competition from moto-taxis since the July fighting. People prefer to use moto-taxis because they are cheaper and faster; and women who used to hire cyclos to go shopping now tend to walk home if their house is less than one km from the market. The number of porters has increased, while the number of their clients (merchants, factories, etc.) has fallen. The devastating drop in the earnings of small traders reflects some seasonal factors. Agricultural products are in short supply in the dry season and prices have risen. Sometimes traders are forced to sell vegetables for less than they paid for them in order to get money for the following day's trading. The number of scavengers, many of whom live around the rubbish dump in Stung Meanchey, has also increased. At the same time, the amount of saleable rubbish has fallen since July 1997, and many cannot afford the 10,000 riels per month needed to monopolise a truck-load of newly dumped rubbish. As a result of all these trends, vulnerable workers' debts

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<sup>10</sup> Net daily earnings are gross earnings minus business expenses (such as the hire of equipment and the purchase of inputs).

to moneylenders are increasing, their food consumption is declining, and (in the case of 31 percent) they are buying food on credit.

**Table 2.2**  
**Average Net Daily Earnings of Four Groups of Vulnerable Workers**  
**(Before July 1997, January 1998 and May 1998).**

Occupation	Net daily earnings (riels)			Percentage change		
	July 1997	Jan. 1998	May 1998	Jan. 98 / July 97	May 98 / Jan. 98	May 98 / July 97
Cyclo drivers	12 250	9 100	6 975	-26,0	-23,0	-43,0
Porters	9 675	6 905	5 415	-29,0	-22,0	-44,0
Small traders	7 050	5 150	3 400	-27,0	-34,0	-52,0
Scavengers	4 155	3 415	3 040	-18,0	-11,0	-27,0

*Source:* CDRI survey data.

The occupational groups differed from each other in many respects. Porters and cyclo drivers (all male) are mainly rural residents who come to Phnom Penh intermittently in search of work. Only 25 percent of porters and 15 percent of cyclo drivers described themselves as permanent residents of Phnom Penh. In contrast, two-thirds of the traders (all female) and all of the scavengers (70 percent of whom were female) were permanent residents. These two groups were also the least educated: in both cases 60 percent had not been to school. Only 5 percent of cyclo drivers and 15 percent of porters had no schooling.

One disturbing aspect of the survey was the amount of harassment at the hands of officials and police reported by vulnerable workers. For instance, since the number of porters, particularly market porters, has increased, there is insufficient accommodation for them, so some have to sleep on the street. They report that they are targeted as potential trouble-makers by the police, and arrested or fined. Similarly, ferry porters report that they have to pay 50 percent of their daily gross earnings to the captain of workers at the ferry headquarters, and cyclo drivers and vegetable traders are constantly chased from their places of business by police and market authorities.

## 2.4. Summary of Findings

The research findings reported in this chapter suggest that both the internal and external crises adversely affected Cambodia's economy in 1997.

The adverse impacts of the July event on Cambodia's economy were apparent and substantial. It caused the depreciation of Cambodia riels against the US dollar, the sharp reduction of consumer spending, the decline of investment expenditures (both domestic and foreign), and the contraction of the tourism sector. The government expenditures were also adversely affected by a temporary suspension of foreign assistance to Cambodia. The July event was thus one of the major factors which slowed economic growth in 1997.

The research also found that the financial crisis in Asia has been adversely affecting Cambodia's economy slowly, but steadily, since July 1997. The Asian crisis has been creeping toward Cambodia through primarily two channels: (1) the realignment of foreign exchange rates (price effects); and (2) the slowdown of economic growth in the crisis countries (income

effects). The differential impacts were observed in two different phases: (I) from July 1997 to January 1998, and (II) from February 1998.

*Phase I: (July 1997 – January 1998)*

The immediate, and apparent, impacts of the crisis on Cambodia was the appreciation of Cambodia's foreign exchange rates (riels and US dollars) vis-à-vis the currencies of the crisis countries. This trend continued until the weakening of regional currencies hit the bottom in January 1998, except the Indonesian rupiah.

The main findings are that:

- A variety of Thai products sold in Phnom Penh markets became actually cheaper in terms of the riels and US dollars than before July 97 level during this period. Consumers enjoyed cheaper imported products mainly from Thailand. However, there were strong indications of persistent weak demand for consumer goods and services, which had been precipitated by the July event last year;
- Despite the erosion of the competitiveness in Cambodia, trade balance actually improved in the second half 1997. This was due mainly to the expansion of garment exports oriented to the European and the US markets which have been nearly unaffected by the Asian crisis.
- Foreign direct investment declined in 1997 relative to the level in 1996. The declining trend was apparent regarding investment from some crisis countries, notably Thailand and Malaysia. By contrast, foreign investment from Hong Kong and Taiwan increased in 1997 mainly in the garment sector. Cambodia's MFN and GSP status from the European Union and the US may explain the favourable development in the garment sector.
- The labour markets in Cambodia also experienced declines in monthly real wages and wage employment after July 1997 compared with that in the pre-July levels. The July event last year caused the decline in real wages and employment, particularly in the service sector. Average net daily earnings of vulnerable workers, cyclo drivers, porters, small traders and scavengers reportedly declined by 18 to 29 per cent during this period.

*Phase II: (February 1998 – May 1998)*

The realignment of foreign exchange rates entered into a new phase in January from which regional currencies started appreciating gradually. Also inflationary pressures became apparent in some of the crisis countries. These factors have eroded the competitiveness gain of the crisis countries in phase I. Also the slowdown of economic growth in the crisis countries has been adversely affecting some export products in Cambodia.

The main findings are that:

- The prices of many Thai products in terms of Cambodia riels had indeed bounced back to a more or less the levels a year ago. This may indicate that Cambodia's loss of competitiveness due to the exchange rate realignment was short-lived and temporary.
- There are some indications that the slowdown of economic growth in the crisis countries has been affecting Cambodia gradually, but steadily. Investment projects from the crisis countries, particularly from Thailand and Korea, dropped sharply in the first quarter 1998.

This will decelerate the accumulation of physical and human capital, hence economic growth in the medium to the long term.

- Some export-oriented sectors, such as wood processing and plastic, appear to have been severely affected by the weak demand in the crisis countries.
- Daily earnings of vulnerable workers declined considerably in recent months due to the weak demand in domestic markets. Their livelihood has been also pressured by a recent inflation, particularly of rice.



## **Chapter Three**

### **The Poverty Profile**

#### **3.1 The Background**

Two unique features of Cambodian history that have a bearing on its economic and human development situation. First, Cambodia has experienced, during the Khmer Rouge years 1975-79, not merely a genocide on a scale comparable to that of Stalin's tyrannical rule in the Soviet Union in 1930's, but deliberate state-sponsored destruction of economic, social and human capital. The extent of the destruction, not least in human life, was so great that the survival of the nation was at stake. The Khmer Rouge period has left an indelible mark on the structure of the Cambodian population. For instance, in the present population age group 40-44 there are only 66 males per 100 females. People with any higher education -- intellectuals, teachers, even individuals wearing glasses and hence presumed to be literate -- were targeted for execution.

Another unique feature of Cambodia that has a bearing on its development is its history of political turbulence. During most of the latest three decades the country has been involved in armed conflicts, the result being large displacement of population for security reasons (about 100,000 internally displaced people), a large proportion of population being disabled because of armed conflict and land mines (30 disabled per 1,000 persons), and large number of female-headed households (25.3 per cent of all Cambodian households).

The turbulent past has had a profound influence on Cambodia's development.<sup>11</sup> Cambodia is now considered to be one of the poorest countries in the world, with a per capita income of 260 USD. Since 1993 the new Government of Cambodia has made important steps in reestablishing political and economic stability. One of the main priorities in the development strategies laid down in Cambodia's First Socioeconomic Development Plan 1996 - 2000 is poverty reduction. Four basic surveys have been undertaken during the past five years to collect systematic information about the poor and assist the government in designing effective policies to tackle the problem of poverty. Furthermore, the first comprehensive population census since 1962 was undertaken in 1997. The Cambodia Socio-Economic Survey 1993/94 (CSES), carried out by the National Institute of Statistics within the Ministry of Planning and sponsored by ADB and UNDP, was the first large-scale household survey of living standards in Cambodia, although a complete coverage of the country was not feasible for security reasons. On the basis of this study a nation-wide poverty profile of the country for the years 1993/94 was elaborated,<sup>12</sup> which provided policy-oriented comparisons aimed to permit a better targeting of the anti-poverty programmes and served as a baseline for monitoring and assessment of future developments of Cambodia achieving poverty alleviation. This survey was followed up by two more socio-economic surveys undertaken in 1996 and 1997. On the basis these surveys, the poverty profile was updated in 1998.<sup>13</sup> In addition, a demographic survey, serving the purpose of a precursor to the subsequent population census, was undertaken in 1996.<sup>14</sup>

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<sup>11</sup> UNDP (1997:7)

<sup>12</sup> Prescott and Pradhan (1997).

<sup>13</sup> Poverty Profile (1997).

<sup>14</sup> For summary results of the survey see Demographic Survey (1996).

### 3.2 Income Distribution and Poverty

In order to answer the basic policy questions on poverty, such as “who are the poor in the country?”, “how many poor are there?”, “where do they live?” and “what are their sources of income?” the socio-economic surveys in 1993/94 and in 1997 were used to analyze the distribution of living standards in Cambodia. Because there are no reliable data on income distribution for different strata of the population, we will analyze the distribution of the per capita consumption by quintiles and by different population groups (Table 3.1 and 3.2).

Per capita consumption is widely used as a basic indicator of welfare standards. Per capita consumption in the survey areas in 1993/94 was on average about 1,314 Riels per day, which was roughly equal to 218 USD per year. For the year 1997 per capita consumption on average was 1,543 Riels per day or about 260 USD per year. The high share of food in total household consumption expenditures is another indicator of Cambodia’s low standard of living. On average 67 per cent and 64 per cent of all consumption expenditures in 1993/94 and 1997 respectively, were devoted to food consumption. The rural households in 1997 spent as much as 71 per cent of total monthly consumption expenditure on food.<sup>15</sup> According to the 1997 socio-economic survey, the average level of per capita consumption in Cambodia is 2,261 calories per day.

**Table 3.1**  
**Per Capita Consumption by Quintiles, 1993/94 and 1997.**

	Per capita consumption per day, 1997			Per capita consumption per day, 1993/94		
	Nominal (Riels)	Real (Riels)	Food share	Nominal (Riels)	Real (Riels)	Food share
1 (poorest)	796	979	0.75	734	963	0.75
2	1,160	1,413	0.73	1,029	1,356	0.71
3	1,543	1,849	0.70	1,314	1,721	0.69
4	2,183	2,557	0.68	1,803	2,307	0.66
5	5,435	5,852	0.62	4,281	4,962	0.57
<i>By area</i>						
Phnom Penh	4,453	4,693	0.56	4,267	4,367	0.56
Other urban	2,859	3,076	0.68	2,412	2,873	0.67
Rural	1,735	2,187	0.72	1,403	1,887	0.69
All Cambodia	2,223	2,530	0.69	1,832	2,262	0.68

*Remarks:* Real consumption data are expressed in 1993-94 Phnom Penh prices using Laspeyzer’s price deflated.  
Food share is food consumption as a proportion of total consumption.  
All Cambodia excludes areas which could not be surveyed for security reasons.

*Sources:* Prescott and Pradhan (1997). Socio-Economic Survey of Cambodia 1997 (1998);

The indications of low average consumption mask wide differences in real consumption. Nominal consumption expenditures deflated to take into account spatial cost of living differences show a fairly large disparity between the vast majority of population that live in rural areas and those who live in urban areas. Real per capita consumption expenditure

<sup>15</sup> Socio-Economic Survey of Cambodia 1997 (1998).

in 1993/94 was more than twice as high in Phnom Penh as in the country as a whole, and 50% higher in other urban areas. The same pattern is true for 1997. (Table 3.1).

A true nationwide breakdown of the geographic distribution of per capita consumption between provinces is not available because of the shortcomings in coverage of the two surveys. But despite these drawbacks it is clear that the main urban centers -- Phnom Penh and Sihanoukville -- are clearly better off than the rest of the country. The provinces in the coastal area - Kompong Som and Kom Pot - also have significantly higher per capita consumption levels than the other regions. Border provinces in the far West near Thailand, and in the East near Vietnam, have the lowest average consumption levels.

The disparities in individual per capita consumption standards are illustrated by the cumulative distribution function of the per capita expenditures of food, non-food and total items showing the proportion of population which is at or below a given consumption standard. According to the findings of both the surveys in 1993/94 and in 1997 the per capita expenditures of the richest 20 per cent of the population of Phnom Penh are high enough to allow non-food spending to exceed food expenditures. By contrast, the distribution of individual consumption levels in the rural sample is so low that food consumption exceeds non-food spending for everybody:

**Table 3.2**  
**Inequality Measures by Areas 1993/94 and 1997.**

	Gini coefficient		Consumption share (%) of poorest 10%		Consumption share (%) of richest 10%	
	1993/94	1997	1993/94	1997	1993/94	1997
Phnom Penh	0.42	0.359	2.5	3.5	31.2	30.3
Other Urban	0.46	0.414	2.7	3.2	36.7	35.3
Rural	0.29	0.255	4.4	4.7	22.9	23.1
Total	0.37	0.366	3.4	3.7	32.8	32.2

Figures refer only to sampled areas

Sources: Prescott and Pradhan. (1997:13); Socio-Economic Survey of Cambodia 1997 (1998: 126).

With regard to inequality in distribution of per capita consumption, it is worthwhile to mention that Lorenz curves of the cumulative share of consumption as a function of cumulative population shares show that inequality in consumption expenditure is higher in urban areas than in rural areas, with the greatest disparity evident within "other urban areas". The richest 10 per cent of the population accounts for more than 30 per cent of total consumption expenditure in urban areas, while the poorest 10 per cent consume around 3 per cent (Table 3.2)

The Gini coefficient<sup>16</sup> is used to measure the degree of concentration of income or expenditure or as a measure of inequality in this characteristics. It always ranges between zero and one. The closer the value of the Gini coefficient is to zero, the lower the inequality in distribution. The Gini coefficient was estimated to be 0.366 for Cambodia in 1997. It ranged from a maximum value of 0.414 in 'other urban areas' to a minimum value of 0.255 in the rural areas. By comparison, the Gini coefficients in the neighboring countries are 0.32 in Laos, 0.34 in Vietnam and 0.32 in Indonesia.<sup>17</sup>

<sup>16</sup> Defined as the ratio of the area between the Lorenz curve and the 45 degree line of complete equality and the total area under the diagonal line.

<sup>17</sup> Prescott and Pradhan (1997: 15).

### 3.3 Measurements of Poverty

According to the World Bank methodology, setting a poverty line is a prerequisite for measuring poverty in order to make income distribution comparisons between different population groups, as well as for the international poverty comparisons. The scope of these poverty comparisons is to target antipoverty programs and monitor development progress. Unlike most of the neighboring countries, Cambodia has not yet established an official poverty line. The baseline poverty profile was designed to provide estimates of poverty in Cambodia which are comparable to those developed recently by the World Bank for a number of other Southeast Asian countries.<sup>18</sup> Per capita consumption was calculated at the individual level, assuming that each household member receives an equal share of the households total consumption; and these estimates were compared to two alternative poverty lines to determine an individual's poverty status. The first "*food poverty line*" consisted of the estimated cost of a reference food bundle yielding 2,100 calories per day in energy and whose composition was based upon typical consumption patterns on the middle income quintile of Cambodians in 1993-1994. The daily per capita cost of this reference food bundle was priced separately for three distinct population strata: Phnom Penh residents (1,185 Riels per day), Other Urban residents (995 Riels per day), and Rural residents (881 Riels per day). At the time of 1993/94 socio-economic survey, one USD was approximately equal to 2,500 Riels. The regional poverty lines take into account geographic price variations in the cost of the same food basket in different parts of the country (Table 3.3). The second "*poverty line*" included a modest non-food allowance, i.e. the amount of non-food items consumed by those with per capita total expenditure just equal to the food poverty line. The resulting poverty lines in 1993/94 (baseline) are shown in the Table 3.3, and were 1, 578 Riels per person per day in Phnom Penh, 1,264 Riels per person per day in other urban areas, and 1,117 Riels per person per day in rural areas.

**Table 3.3**  
**Poverty Lines in 1993/94 and 1997 (riels/day).**

	July-Sept. 1994	July 1997
<i>I. Food poverty line</i>		
Phnom Penh	1,185	1,378
Other urban	995	1,102
Rural	881	940
<i>II. Non-food allowance</i>		
Phnom Penh	393	441
Other urban	269	305
Rural	236	270
<i>III. Poverty line (I + II)</i>		
Phnom Penh	1,578	1,819
Other urban	1,264	1,407
Rural	1,117	1,210

Source: Poverty Profile (1997).

<sup>18</sup> Prescott and Pradhan (1997).

In 1997 an analysis was made of the retail price changes during the period July - September 1994 (baseline period) to June 1997 (the time when the 1997 socio-economic survey was made) and on the basis of this the Poverty Profile has been updated, as shown in the Table 3.3.

Updating the baseline poverty estimates involved the following steps: 1) the baseline poverty lines, which consist of the estimated cost of a reference bundle of minimally necessary food items priced differently for each geographic area and supplemented with limited non-food allowances, were updated for retail price changes; 2) new estimates of per capita total consumption by individual (in current prices) were compared to the updated poverty lines to identify the poor and to serve as a basis for calculating a new set of poverty rates. For Cambodia, given of data limitations, the need for comparability necessitates careful evaluation of the estimates at each step in the process and in some cases the preparation of additional estimates.

Based on the established poverty line for Cambodia, a number of indexes were calculated to show the depth and nature of poverty. The most commonly used index of poverty is simply the proportion of the population whose expenditure levels fall below the poverty line, often called the *head-count index*. One limitation of the head-count index is that it does not measure how far poor households' expenditure levels fall below the poverty line. The *poverty gap index* takes into account the variations in how far the poor households' expenditure levels fall below the poverty line. The poverty gap measures the average shortfall (gap) between the poor households' expenditure levels and the poverty line. A useful interpretation of the poverty gap index is the percent of aggregate consumption, which would need to be redistributed from the rich to the poor in order to raise per capita consumption level of the poor up to the poverty line. However, the interpretation is based on unrealistic assumption that such a redistribution of consumption could be perfectly targeted. A third measure, the *poverty severity index* takes into account the distribution of living standard among the poor. This measure is sensitive to such inequality, indicating more poverty when the average poverty gap is more unequally distributed among the poor. Updated estimates of poverty rates were obtained by comparing nominal levels of per capita consumption (i.e. consumption measured in current prices) to the price-updated poverty lines).

Comparing the poverty lines for urban and rural areas of the country with the individual distribution of the per capita consumption expenditure, reported in the 1997 socio-economic survey provided the basis for measuring the poverty indexes (head-count index, poverty gap, severity of poverty, which were used to make poverty comparisons. (Table 3.4).

Looking at the incidence of poverty in different areas, the regional poverty profile shows that rural poverty is higher than urban poverty. The highest incidence of poverty was found in the rural areas (40.1 per cent), which is almost four times higher than 11.1 per cent incidence of poverty in Phnom Penh, and significantly higher than in Other Urban areas (29.9 per cent). With regard to the magnitude of regional contributions to the national poverty, it is obvious that at least 88 per cent of all poor are concentrated in rural areas.

**Table 3.4**  
**Poverty Structure by Area in 1993/94 and 1997.**

	% of total population	Head Count Index		Poverty Gap		Severity Index	
		Index %	Contribution to total % /a	Index %	Contribution to total %	Index %	Contribution to total %
<b>1997</b>							
<i>Food Poverty Line</i>							
Phnom Penh	9,9	3,4	1,9	0,5	1,4	0,1	1,1
Other Urban	10,7	15,4	9,2	3,3	10,1	1,1	10,4
Rural	79,4	20	88,9	3,9	88,5	1,2	88,5
Total	100	17,9	100	3,5	100	1,1	100
<i>Poverty Line</i>							
Phnom Penh	9,9	11,1	3,1	2,2	2,5	0,6	1,9
Other Urban	10,7	29,9	8,9	7,5	9,2	2,7	9,5
Rural	79,4	40,1	88,1	9,7	88,3	3,4	88,6
Total	100	36,1	100	8,7	100	3,1	100
<b>1993/94</b>							
<i>Food Poverty Line</i>							
Phnom Penh	10,7	6,2	3,3	1,3	3,7	0,4	4
Other Urban	11	19,6	10,8	4,4	13,1	1,4	14,8
Rural	78,2	21,9	85,9	4	83,2	1,1	81,2
Total	100	20	100	3,7	100	1,1	100
<i>Poverty Line</i>							
Phnom Penh	10,7	11,4	3,1	3,1	3,6	1,2	4,1
Other Urban	11	36,6	10,4	9,6	11,6	3,6	12,6
Rural	78,2	43,1	86,5	10	84,9	3,3	83,3
Total	100	39	100	9,2	100	3,1	100

*Remark:* The entries in the columns 'contribution to total %' are the each areas frequency (N) multiplied by the ratio of the area's index to the total index for the whole country

*Sources:* Socio-economic survey of Cambodia 1993/94 (1995) , Socio-economic survey of Cambodia 1997 (1998); Prescott and Pradhan (1997).

For Cambodia as a whole 36 per cent of population were found to be below the poverty line, with 20 per cent of population having per capita expenditure lower even than the food poverty line. (Table 3.4). How sensitive are these regional poverty comparisons to the choice of the poverty line? Using the food poverty line yields considerably lower levels of poverty, but it does not alter the policy conclusion that poverty is the highest in rural areas and lowest in Phnom Penh. The sample weighted aggregate incidence of food poverty becomes 18 per cent. This is still high figure, which suggests that around one fifth of Cambodian population is food-insufficient and cannot meet their daily calorie requirement, even if their consumption expenditures would include nothing but food.

The majority of population in Cambodia is distributed around the poverty line. According to an analysis of the sensitivity of the poverty measures to the changes in poverty line even small changes in the poverty line in rural areas would yield relatively large changes in the head-count index, that is the number of individuals below the poverty line, as a large

share of the population is concentrated close to the poverty line. By contrast changes in the poverty line in Phnom Penh would have a comparatively smaller effect on the head-count index, as the majority of the population live well above the poverty line.<sup>19</sup>

The poverty gap and poverty severity indexes are highest in rural areas. The baseline poverty profile 1993/94 also found that poverty rates were highest among farmers (44 per cent) and lowest among civil servants (20 per cent), and that agriculture accounts for a dominant share of the country's poor (71 per cent in 1997).<sup>20</sup> Seen from the angle of employment categories, the highest incidence of poverty was encountered among unpaid household workers (43 per cent) and self-employed (40 per cent). Largely as a result of the high proportion of farmers among the poor, the self-employed accounted for 74 per cent of total poverty.

*The Human Development Index* is another source of information about the poverty situation in a country. It shows more than the ability to attain a certain level of consumption. The Human Development Index is a composite measure of longevity, measured by average life expectancy at birth; educational attainment, measured as a combination of adult literacy rate and school enrollment ratios, and standard of living, measured by real GDP per capita (adjusted for the purchase parity adjusted exchange rate). According to the Human Development Report of 1997, the Human Development Index for Cambodia is 0.348, which gives it the rank of 153 out of 175 countries. However, a recalculation of the index on the basis of the 1997 socio-economic survey for Cambodia would increase it to 0.427, which would rise the country up to the 140th level, just below of that of India and Pakistan.<sup>21</sup> Still, it would give Cambodia one of the lowest positions in the region. The gender related development index (GDI), another human development indicator used by the HDR 1997, is not available for Cambodia.

Cambodia has one of the lowest rates of utilization of health services in the world. The infant mortality rate is still very high. Over 90 per thousand new born children die within their first year, earning Cambodia the unenviable position as the country with the highest infant mortality in East/Southeast Asia.

HIV/AIDS deserves special attention, since Cambodia has one of the most serious HIV epidemics in Asia, and economic implications of this for the country in the nearest future could be staggering. It has been estimated a figure of 120.000 people infected with HIV/AIDS, and a projection made till year 2006, when almost a million could be expected to be infected.<sup>22</sup>

### **3.4 Who are the poor in Cambodia?**

Some aspects of the pattern of poverty have already been discussed above. Most notably that the rural and agricultural population have a higher incidence of poverty than the urban and non-agricultural population. As the vast majority of the population live in rural areas and earn their living in agriculture, it follows that this category makes up the overwhelming majority of the poor in Cambodia. However, this should not detract attention from the fact that large sections of the urban population, too, live in poverty and that there is a

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<sup>19</sup> Prescott and Pradham (1997: 23-24).

<sup>20</sup> Prescott and Pradham (1997).

<sup>21</sup> UNDP (1997: 16-17).

<sup>22</sup> UNDP (1997: 51-52).

risk that the number of urban poor may increase over time as people are pushed from rural areas to the towns and cities in search for a livelihood.

An examination of the demographic characteristics of the poor yield additional interesting insights. Thus, the 1997 socio-economic survey shows that large households are more likely to be poor than households with few members. Thus, the average household size in the poorest quintile was 6.6, compared 4.1 in the richest quintile (Table 4.1). This can largely be explained by the higher dependency ratio in the larger households. In other words, in large households each ricewinner<sup>23</sup> has to support more people than in small households. The links between the demographic structure and poverty is discussed in some detail in Chapter Four. As large households also tend to be young households, with a low average age and many children, it follows that the young, too, are over-represented among the poor.

Because of its violent past, Cambodia has an unusually high proportion of female-headed households. More than a quarter of all households are headed by a woman.<sup>24</sup> Female-headed households have in the past been highlighted as being particularly vulnerable to deprivation and poverty. However, the socio-economic survey of 1997 brought out the somewhat surprising finding that incidence of poverty is actually lower among households headed by women than among those headed by men.

**Table 3.5**  
**Poverty by Gender of the Head of Household in 1997.**

Gender	Head-count index	Poverty gap	Severity index
Male	36.7	8.9	3.1
Female	33.4	8.1	2.9
Both sexes	26.1	8.7	3.1

*Source:* Poverty profile (1997: 43).

A third of the female headed households were found to be below the poverty line in 1997, compared to 37 per cent of the households headed by men (Table 3.5). However, it would be wrong to infer from this that female-headed households are less exposed to poverty just because they are headed by the female. The differences in poverty between the two groups of households are largely due to differences in their demographic structure. Female-headed households are on average much smaller than those headed by male. The average size of a female headed household is 4.3, as against 5.5 for households headed by men, and 47 per cent of the former, but only 26 per cent of the latter have no more than three members.<sup>25</sup> The smaller size of the female-headed households can obviously partly be explained by the absence of a spouse, but a more important reason would seem to be that they have a smaller number of dependent children. Almost half, 45 per cent, of the female heads of households are over the age of 50, in sharp contrast to the case of male heads of households. In 63 per cent of the female headed households the head of the household is widowed or separated. Furthermore, female headed households are more predominant in urban than in rural areas. Because of these differences in the demographic characteristics, the dependency ratio in the female headed households is on average much more favourable (80 per cent) than in the

<sup>23</sup> The word 'breadwinner' seems a bit out of place in a rice-based society.

<sup>24</sup> Rao and Zaan (1997: 3-4).

<sup>25</sup> Rao and Zaan (1997: 7); Socio-economic survey of Cambodia 1997 (1998: 35).

households headed by men (92 per cent).<sup>26</sup> This difference no doubt goes a long way to explain the differences in the incidence of poverty.

**Table 3.6**  
**Incidence of Poverty by Level of Education of Head of Household in 1996.**

	Frequency, %	Head count index, %	Poverty gap, %	Severity Index, %
<i>Literacy</i>				
Illiterate	31.6	41.7	10.3	3.7
Literate	68.1	33.5	8.0	2.8
<i>Level of education</i>				
None	30.9	41.7	10.3	3.6
Primary	43.3	39.7	9.7	3.4
Lower secondary	16.6	23.8	5.4	1.8
Higher Secondary	5.1	12.4	2.5	0.8
All categories	100.0	36.1	8.7	3.1

*Remark:* 'Primary', 'lower secondary' and 'higher secondary' include those who commenced but did not complete the respective level.

*Source:* Poverty profile (1997: 43).

The 1996 socio-economic survey failed to establish a clear-cut relationship between education and exposure to poverty, except at the level of secondary education (Table 3.6).<sup>27</sup> However, this should not be taken as an indication that education is unrelated to poverty. Apart from the somewhat superficial nature of the analysis,<sup>28</sup> there is sufficient evidence from elsewhere to conclude that the private and social returns to education, particularly at the primary and lower secondary level, are positive and highly significant. Thus, the calculations by UNDP using the same data show that when age and disability is controlled for, wage earners with primary education are found to earn substantially more than those without any formal education. Fertility rates are also found to be substantially lower for women with some schooling than for those who have not attended school.<sup>29</sup>

### 3.5 International Poverty Comparisons

Is Cambodia poorer or better off than other East Asian countries in terms of the proportion of the total population in poverty? The comparison is difficult to make because the large part of the country was excluded from the sample frames of both the socio-economic survey in 1993/94 and 1997. Nevertheless, it is possible to compare the regional Cambodian estimates with corresponding estimates from other countries for which poverty estimates were calculated using the same comparable methodology for setting poverty lines. Comparable poverty estimates for Vietnam, Laos and Indonesia are summarized in Table 3.7. These suggest that the incidence of rural poverty in Cambodia (43 per cent) is lower than in some of its neighboring countries, notably Vietnam (47 per cent) and Laos (53 per cent), but remains

<sup>26</sup> Rao and Zaan (1997: 6).

<sup>27</sup> See also Poverty Profile (1997: 23-24).

<sup>28</sup> Apparently the analysis was based on a simple cross tabulation of two variables without taking any other factors, such as age, household size etc. into account.

<sup>29</sup> UNDP (1997: 60-62).

considerably higher than in Indonesia (24 per cent).<sup>30</sup> However, considering that the socio-economic survey in 1993/94 excluded large parts of the country from the sample size it seems likely that rural poverty in Cambodia was underestimated. At 23 per cent, urban poverty in Cambodia appears to be marginally higher than in the rest of Indochina (Vietnam 20 per cent and Laos 24 per cent) and much higher than in Indonesia (10 per cent).

The regional comparisons shows that although the magnitude of the development gap between the economies of Indochina and the rest of the Asia remains large, Cambodia's situation is not very different from that of its Indochinese neighbours.

**Table 3.7**  
**Poverty in a Regional Perspective.**

	Head count index, %			Poverty gap, %		
	Urban areas	Rural areas	All areas	Urban areas	Rural areas	All areas
<i>Food poverty line</i>						
Vietnam	9.9	28.2	24.4	2.0	6.2	5.4
Laos	7.6	26.0	21.6	1.0	5.5	4.4
Indonesia	2.8	10.7	7.9	0.3	1.3	1.0
Cambodia	12.9	21.9	20.0	2.9	4.0	3.7
<i>Poverty line</i>						
Vietnam	19.6	46.5	41.2	4.5	12.4	10.8
Laos	23.9	53.0	46.1	4.5	14.4	12.1
Indonesia	10.2	23.6	19.6	1.7	4.3	3.5
Cambodia	24.2	43.1	39.0	6.4	10.0	9.2

Source: Prescott and Pradham (1997: 33).

### 3.6 Changes in Poverty

The updated poverty profile of Cambodia, which was prepared using the data from the socio-economic survey in 1997, suggests that Cambodia was successful in reducing poverty during the approximately three years since the period to which the baseline estimates refer.<sup>31</sup>

Despite growing inequality in the overall distribution of per capita consumption, the report estimates that the incidence of poverty declined modestly from 39 to 36 per cent in Cambodia as a whole during that period. The incidence of poverty would appear to have declined most in the urban areas outside Phnom Penh (from 37 to 30 per cent), modestly in the rural areas (from 43 to 40 per cent), but not at all in Phnom Penh, where it remains at the level of 11 per cent).

However, despite the registered fall in poverty and the rapid GDP growth throughout much of the 1990s there are reasons to take any conclusion that poverty has been declining with a grain of salt.

Firstly, the registered decline in poverty is hardly statistically significant. Although the analyses of changes in poverty based on the two surveys that have been published so far do not include any discussion on the reliability of the results, several factors makes it reasonable to assume that the results are subject to a rather wide margin of error. As discussed above, there were considerable differences in the coverage of the two surveys. None of the surveys

<sup>30</sup> It should be noted that the figures refer to the situation before the onslaught of the crises in 1997, which have hit Indonesia particularly hard.

<sup>31</sup> Poverty profile (1997).

covered the whole country, but the 1993/94 survey in particular excluded large parts of the country for security reasons. Furthermore, as noted above a large part of the population live close to the poverty line, either above it or below it. This implies that even a small change in the poverty line will have a large impact on the head count index, that is the proportion of the population living below the poverty line. Hence, even minor errors in the adjustment of the poverty line for price changes will have a strong influence on the registered change in poverty.

Secondly, although rather high rates of GDP growth were registered between 1993 and 1996, but not in 1997, the links between GDP growth and a reduction in poverty are far from automatic. The composition and nature of the economic growth matter, too. As discussed in Chapter One, there are reasons to believe that growth have not translated into broad based increases in incomes. Most of the growth has taken place in industry and services, which continue to imply a small proportion of the population. Growth rates in agriculture have not been very impressive and the share of agriculture in GDP has fallen considerably at the same time as the share of the labour force employed in agriculture has increased. Furthermore, the GDP growth as well as the per capita growth of GDP in the past few years can by and large be ascribed to the rapidly growing labour force and a fall in the dependency ratio. Labour productivity, by contrast, has actually fallen (Table 1.7). In agriculture, labour productivity is estimated to have fallen by 16 per cent between 1992/93 and 1996. Although other factors, too, apart from labour productivity, affect poverty, it may be concluded that the economic performance in the past five years provide little ground for assuming a fall in poverty. This is particularly the case if the dismal performance in 1997 is also taken into account.

The only factor which would support the conclusion that poverty has gone down is the sharp growth in rice production between 1994 and 1995. However, the increase in rice production during past two to three years can be apparently to a large extent be attributed to favourable climatic conditions, rather than to increased productivity or increased cultivated land surface, hence this increase in production should not be taken as a harbinger of future high rates of growth of agricultural production.

Irrespective of whether poverty has actually declined in recent years not, it says little about future development. To get a glimpse of the future, we must identify the main causes of poverty and analyze if there are any changes in these factors, which may lead us to believe that poverty will diminish or increase. This issue is addressed below, in Chapter Four.

### **3.7 A Note on the Quality of the Data**

The 1993/94 socio-economic survey included only 32,079 people in 5,578 households, and was administered over four rounds to cover the seasonal patterns in consumption. More importantly, the survey used a truncated sampling frame, which did not cover all of Cambodia. This frame excluded the areas unsafe for security reasons at the time of the survey, or which were sparsely populated and expensive to reach.<sup>32</sup> The geographic coverage of the survey was limited to only 15 out of Cambodia's 21 provinces, and most provinces were only partially covered. The survey distinguished three main geographic areas: Phnom Penh, 'other urban centers' and 'rural areas', based on the census of villages prepared by UNTAC (United Nations Transitional Authority). There had been no population census undertaken in Cambodia since 1962, making it difficult to develop a proper population frame and stratification criteria. Overall, the population frame used for the survey is estimated to have

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<sup>32</sup> Socio-economic survey of Cambodia 1993/94 (1995: 5).

covered 65 per cent of the individuals of Cambodia and 68 per cent of the households. The coverage ranged from 100 per cent of the population living Phnom Penh, to 90 per cent of the population in 'other urban areas', to only 60 per cent of the rural population. The results of the survey, including the development of the poverty baseline are valid only for the areas included in the survey. The truncated nature of the sampling frame of the 1993/94 socio-economic survey also affects its comparability with the subsequent surveys.

Regarding the design of the questionnaires used in the 1993/94 survey, the main drawback is that comprehensive data were only collected for 177 items of food expenditure (quantity consumed, value of this consumption, cash expenditures and in kind consumption). The survey also included information on 266 categories of nonfood consumption, but only expenditure values in cash and in kind was collected for these items. It was subsequently concluded that the 1993/94 survey was not sufficiently detailed to permit a thorough analysis of the causes and consequences of poverty.<sup>33</sup>

The updated 1997 Poverty Profile report, based on the 1996, are based on more detailed information collected on an annual basis from the core household questionnaire on demographic characteristics of household members, school enrollment, income and employment, social service access, utilization and expenditures, and private consumption. The sampling frame for the 1997 survey covered about 90 per cent of all households and 20 out of Cambodia's 23 provinces.

A main shortcoming of all the socio-economic surveys undertaken in the 1990s as well as of other sample surveys has been the absence of reliable information about size and characteristics of the population as a whole, in the absence of any recent census data. The lack of basic knowledge about the size of the population add a measure of uncertainty to virtually all economic and demographic analysis in Cambodia. As the results of the 1997 census become available the situation in this regard will be much improved.

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<sup>33</sup> Prescott and Prahan (1997: 5).

## Chapter Four

### Poverty Alleviation and Rural Development

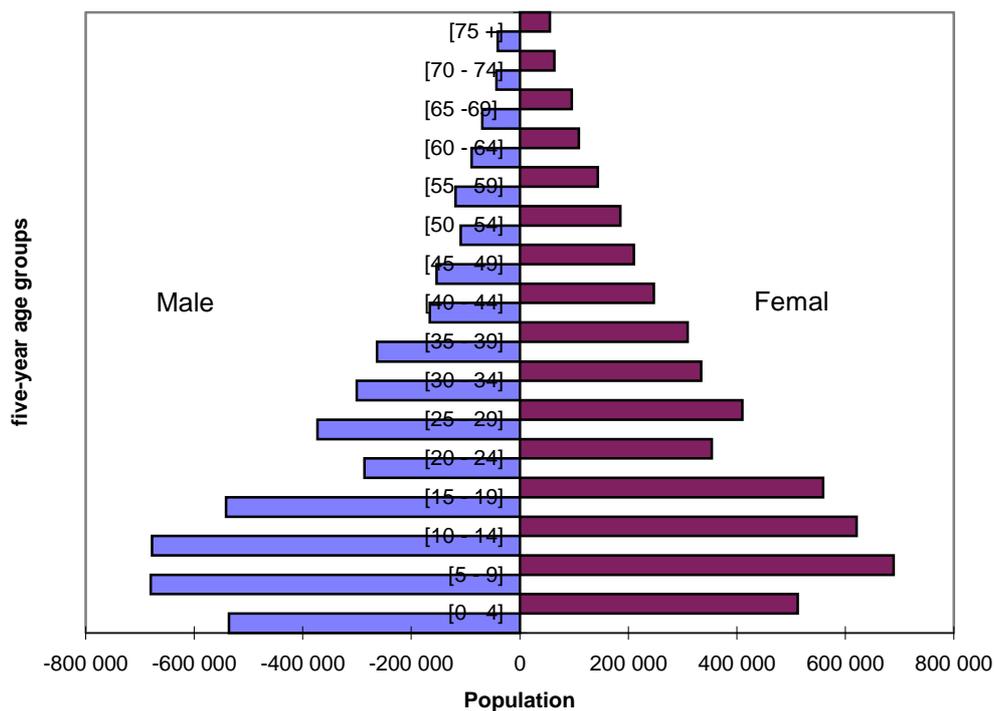
The main causes of poverty in Cambodia, and particularly in the rural areas where most people live, are demographic pressures, lack of productive assets, and insecurity arising from the absence of the rule of law. Each of these will be discussed in turn.

#### 4.1 The Demographic Challenge

Demographic pressures of various kinds have a strong bearing on poverty in Cambodia. Perhaps the most important relates to the age structure of the population. As a consequence of the country's violent past, this has some very distinctive features, as Figure 4.1 shows. Broadly speaking, the age groups born prior to 1980 are relatively small, reflecting not least the suffering during the Khmer Rouge period. On the other hand, the age groups born since 1980, that is those who are presently aged 18 or less, are relatively large, as a result of the "baby boom" which followed after the fall of the Khmer Rouge.

**Figure 4.1**

**Distribution of the population by age and sex, Cambodia 1997**



Cambodia thus has one of the youngest populations in the world, with more than 45 per cent of the population under the age of 15 in 1995. This distorted age structure has important implications for the economy.

To begin with, the very high proportion of children in the population implies a high dependency ratio.<sup>34</sup> In other words, each income earner has to support a high number of

<sup>34</sup> The dependency ratio is defined as the ratio of the non-working population to the working population.

dependants. This has a generally depressing effect on income per head. At the household level the ratio of economically active to non-economically active, which in the Cambodian context basically reflects the number of children in the household, exerts a very strong influence on poverty.

**Table 4.1**  
**Distribution of Poverty by Size of Household, 1997.**

Household size, no.	Frequency	% poor	Poverty gap	Severity index
1	0.4	2.4	0.3	0.0
2	3.4	11.2	1.9	0.5
3	9.9	21.3	4.0	1.2
4	15.2	25.3	5.4	1.8
5	18.0	35.0	8.5	3.0
6	17.6	38.8	10.4	4.0
7	14.9	43.0	10.7	3.8
8	11.2	48.0	11.0	3.7
9	5.5	49.1	12.1	4.3
10	2.6	58.1	15.0	5.4
11	0.7	46.8	12.8	4.5
12 and more	0.4	48.2	15.9	6.7
All sizes	100.0	36.1	8.7	3.1

*Remarks:* **% poor** refers to those below the poverty line as defined by the Government and the World bank, based on the 1997 socio-economic survey.  
**The poverty gap** is an index reflecting the average deficit between an individual's per capita consumption and the poverty line, with the deficit defined as zero for those above the poverty line.  
**The severity index** is defined as the poverty gap index, except that the deficit is squared before it is averaged.

*Source:* Poverty Profile (1997).

As Table 4.1 shows, the incidence of poverty is strongly correlated with the size of the individual household. While only 11.2 per cent of the households with two persons are below the poverty line, the incidence of poverty is much higher in the more numerous households, reaching a maximum of 58 per cent in the ten person households. Clearly, it is not the large size of households as such that is the cause of poverty, but the higher proportion of dependants per economically active person in these households.

The youthfulness of the population also implies a high rate of population growth, which exerts a pressure on the economy as a whole and on agriculture in particular to expand at pace with the population, lest per capita incomes and per capita food production will decrease. The population has increased at a rapid pace from its low point after the fall of the Khmer Rouge regime; from 6.5 million in 1980, to 9.1 million a decade later to approximately 11.7 million in 1998 (implying an annual rate of growth of 3.3 per cent per year). Despite recent falls in fertility it will continue to grow fast and is expected to reach 15.5 million by 2010 and 19.3 million by the year 2020.<sup>35</sup> The pressure exerted by such a rapid population increase on the economy is particularly strong in a profoundly agrarian society like that of Cambodia, as land, which for natural reasons is not amenable to expansion, is the main other

<sup>35</sup> Huguet (1997). The size of the population will remain an estimate until the 1997 census results become available.

production factor. The population increase results inevitably in a fall in the per capita availability of land, which implies that productivity of land or yields have to increase at pace with the population in order to prevent an overall fall in incomes and food availability. So far the Cambodian record in this regard has not been encouraging. The per capita production of rice today is considerably lower than it was three decades ago. Agricultural production will need to increase at a much higher rate than in the past decades in order to prevent the country from becoming permanently dependent on food imports, for which it would have little or no means to pay.

Even more important from the view of policy making, the labour force will increase at an unprecedented high rate in the coming decades. This is because the very large age groups born in the 1980s will enter the labour market, while few will be leaving it. Indeed, this process has already begun. The apparent contradiction in the past few years between the high growth rates of GDP on the one hand and the fall in productivity on the other hand is primarily a consequence of the rapid increase in the labour force. As may be seen from Table 4.2, the labour force is expected to increase by 829,000 or 17.5 per cent in the coming five years. This will put an enormous pressure on the economy to generate productive employment opportunities for the large numbers of the new entrants into the labour force. This more than any other factor will determine Cambodia's economic prospects. In view of the rather discouraging development of productivity in the past few years, despite relatively high rates of GDP growth, it implies a need to change the nature of growth. In the future, it must be based on raising productivity in rural areas, and in particular in agriculture, where the large increases in the labour force will be concentrated.

**Table 4.2**  
**Projected Growth of the Labour Force 1997 - 2002.**

Age group	Labour force 1997	Labour force 2002	Growth, no.	Growth, %
15-19	661422	810,327	148,905	22.5
20-24	626,565	1,052,869	426,305	68.0
25-29	783,999	624,945	-159,055	-20.3
30-34	635,265	743,384	108,120	17.0
35-39	579,875	616,930	37,055	6.4
40-44	415,995	558,015	142,020	34.1
45-49	360,301	384,827	24,526	6.8
59-54	286,337	337,505	51,169	17.9
55-59	237,141	252,630	15,489	6.5
60-64	153,888	188,329	34,441	22.4
All groups	4,740,788	5,569,763	828,974	17.5

*Remark:* Figures are adjusted for age specific participation rates in the labour force and for age specific mortality rates. Participants in the labour force under the age of 15 and over the age of 64 are not included. The total number of these groups is small. For details on calculation, see Appendix, Table 8.

*Source:* Huguet (1997:5); Socio-Economic Survey of Cambodia 1997 (1998: 60, 79).

However, the skewed age structure of the Cambodian population also has a positive aspect. The dependency ratio, that is the ratio of the non-working population to the working population, or the number of non-working members of the society which have to be supported by each working member, is falling and will continue to fall in the coming five to ten years.

The absence of census data implies that any estimate of the dependency ratio is subject to a margin of error. Thus, a calculations based on data from 1996 and from 1997,

respectively, yield different estimates (Table 4.3). The differences between the two calculations are too large to be explained solely by the actual decline in the dependency ratio. However, despite the approximate nature of the figures it is quite clear from the age structure of the population that the dependency ratio is rapidly falling.

Based on the demographic survey of 1996, it is expected that the dependency ratio will improve dramatically from 92 in 1996 to 74 in 2005 and 71 in 2010.<sup>36</sup> This continuous fall in the dependency ratio will mean that, even if productivity does not rise, GDP and income per head will increase as each rice-winner will gradually have fewer dependants to support.

**Table 4.3**  
**Estimates of the Dependency Ratio.**

Dependency Ratio calculated according to two methods:	(1) Demographic Survey UNFP and NMS of Cambodia 1996	(2) CSES 1997
a) Dependency Ratio = Total population - actually working population / actually working population	1.39	1.19
b) Dependency Ratio = Age groups [0 -14] + age group [65+] / age group [15 -64]	0.92	0.78

1. According to the Demographic survey of Cambodia in 1996 and Socio-economic survey in 1996.
2. According to the Socio-economic survey in 1997.

*Source.* Authors' calculation

The combination of a rapidly increasing labour force and a falling dependency ratio suggest that Cambodia is facing two main scenarios.

The first scenario assumes that the economy fails to generate productive employment opportunities at the pace required. In this situation the increase of the labour force will take place at the expense of productivity. Concretely, this is likely to take the form of increased work sharing and underemployment in agriculture and distress migration to urban areas in search of non-farm jobs, which almost invariably will be in the form of low productivity self-employment. As a result of the fall in labour productivity, incomes will go down and poverty will increase, although this process will be mitigated to a certain extent by the fall in the dependency ratio. There may still be positive GDP growth, but this will be exclusively due to the increase in the labour force. Stagnant or falling personal incomes will further depress the already low ability to save, and as a consequence productive investments in agriculture and elsewhere will go down, resulting in further stagnation or decline in labour productivity. The economy will get caught in a vicious circle of falling productivity and returns to labour from which it will become increasingly difficult to escape.

The second scenario assumes successful expansion of employment without any fall in productivity. Because of the fall in the dependency ratio this will automatically translate into improved per capita incomes and reduced poverty. As the vast majority of the population live around the poverty line, the impact on poverty may well be substantial. As importantly, as incomes increase beyond the level where they are barely adequate to cover basic needs, the

<sup>36</sup> Huguet (1997: 25). The calculation is based on age group comparisons only, without taking age specific participation rates in the labour market into account. However, there are no reason to expect any major changes in these rates.

ability and propensity to save is likely to increase substantially. This, in its turn will permit productive investments in agriculture and elsewhere, resulting in increased production, improved productivity and/or more employment opportunities. In essence, a beneficial circle is created, which may form the basis for sustained economic growth. Experiences from other countries in the region -- not least Thailand, but also China and, until recently, Indonesia, and previously Taiwan and South Korea -- show that the effect of this type of development can be quite dramatic. However, it is far from automatic.

Thus, the two demographic trends described above create both a challenge and an opportunity. The challenge is to create employment opportunities for the rapidly increasing labour force without compromising the level of productivity. In other words, the additional employment opportunities created must be at a level of productivity that is at least as high as that of the already existing jobs. The opportunity lies in the falling dependency ratio, which implies that if the challenge to create productive employment opportunities is successfully met, the improved dependency ratio will add to the growth momentum through automatic improvements in per capita incomes and, as a consequence in savings which can be turned into productive investments.

### ***Agricultural development: A crucial factor***

Whether or not Cambodia will successfully face up to the employment challenge ahead will to a large extent be determined by developments in the agricultural sector. As 75-80 per cent of the population derive their living from agriculture, the brunt of the burden of employment creation will inevitably fall on the agricultural sector. Agricultural production will have to increase on a sustained basis at least at pace with the increase of the labour force, which in real terms means by at least four to five per cent per year. This conclusion does not imply any neglect of the non-farm sectors. Indeed, there is a strong need for a diversification of the rural economy and for a development of non-farm employment opportunities, primarily in rural areas, but also in urban areas. However, such a diversification will only take place in the context of a dynamic development in agriculture and with increases in real production in agriculture beyond subsistence level. At the same time, a dynamic development of agriculture is likely to serve as a demand-based catalyst for a development of the non-farm sectors and for a diversification of the rural economy.

Past trends in agriculture do not, at first look, seem to give much ground for optimism (Table 4.4). Production recovered quite quickly after the abysmal situation during the Lon Nol and Khmer Rouge period.<sup>37</sup> However, between 1980/81 and 1994 the trend in rice production has been one of slow growth with large yearly fluctuations. This growth was largely due to an increase in the cultivated area, while yields remained more or less stagnant and per capita production actually fell. Although data are not available, it seems safe to conclude that labour productivity in agriculture declined throughout this period and by 1994 it must have been considerably below its peak levels in the late 1960s.

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<sup>37</sup>Rice production declined by 84 per cent between 1970 and 1974 (Nesbitt, 1996: 9).

**Table 4.4**  
**Trends in Rice Production.**

Year	Production 1,000 tons	Area 1,000 ha	Yield kg/ha	Production/ capita, kg
1967/69	2,500	2,513	1000	385
1980/81	1,717	1,441	1,192	262
1985/86	1,812	1,462	1,239	232
1986/87	2,093	1,535	1,364	260
1987/88	1,815	1,378	1,317	218
1988/89	2,500	1,879	1,330	292
1989/90	2,672	1,932	1,383	302
1990/91	2,500	1,890	1,323	273
1991/92	2,400	1,910	1,257	254
1992/93	2,221	1,844	1,204	227
1993/94	2,383	1,857	1,283	235
1994/95	2,223	1,924	1,156	212
1995/96	3,448	2,086	1,653	318
1996/97	3,458	2,171	1,593	308
1997/98	3,415	2,076	1,645	299

*Source:* Curtis (1989: 55-56; WFP/FAO, 1997: 13, 64-66; Huguet (1997: 21, 31-34); Agricultural Statistics (1998).

*Remark:* The figures refer to 'harvest year', i.e. June - May. The figures on rice production and cultivated area are approximate. A WFP survey in 1994/95 found that the actual harvested area was some 22 per cent less than reported, while yields were understated by some 25 per cent. Figures on area and yields in this table are based on cultivated area. Often, the harvested area was substantially smaller (see Table 1.11). Yields are based on cultivated and not harvested areas.

The past few years have seen a marked improvement in rice production. The total production increased by 55 per cent, from 2.2 to 3.4 million tonnes, between 1994 and 1995 and has since remained more or less constant at 3.4 million tonnes. This sharp increase in production in the past few years raises the question if there has been any fundamental change in agricultural practices and if it can be seen as a harbinger of a new era of a more dynamic development of agriculture. Available evidence suggests that there is no unequivocal answer to these questions.

The sharp increase in production between 1994 and 1995, in particular, was partly due to natural factors. Climatic conditions were unusually adverse in 1994. Some 22 per cent of the cultivated paddy land was never harvested, compared to only 8 per cent in 1995 and 2 per cent in 1993.<sup>38</sup> There would also appear to have been some underreporting of production in earlier years.<sup>39</sup> The increase was also, but to a lesser degree, due to a trend of an increase in the cultivated area of wet season rice. The increase in the cultivated area of wet season rice from 1,345 thousand hectares in 1985/86 to 1,740 thousand hectares in 1990/91 to 1,827 thousand hectares in 1997 has largely been made possible by improvements in the security situation in the country. Although there are still unused land reserves there is a clear limit to an expansion of production by this means.

<sup>38</sup>Agricultural Statistics (1998).

<sup>39</sup>WFP/FAO (1997: 4).

**Table 4.5**  
**Production of Wet and Dry Season Rice, 1993-1997.**

	1993/94	1994/95	1995/96	1996/97	1997/98
<i>Wet season rice</i>					
Cultivated area, 1,000 ha	1,702	1,754	1,870	1,937	1,827
Harvested area, 1,000 ha	1,674	1,330	1,709	1,649	1,685
Yield, kg/ha	1,200	1,300	1,640	1,670	1,600
Production, 1,000 tonnes	2,008	1,728	2,802	2,759	2,673
<i>Dry season rice</i>					
Cultivated area	155	170	216	234	249
Harvested area	150	165	215	230	243
Yield	2,500	3,000	3,000	3,000	3,000
Production	375	495	645	699	742

*Source:* Agricultural Statistics (1998).

*Remark:* Figures refer to 'harvest years', e.g. June - May.

However, there are also clear indications that a process of intensification of agricultural production has begun. The most concrete evidence is the increase in the cultivation of dry season rice, which is entirely dependent on irrigation. While virtually insignificant a decade ago, irrigation-based double cropping of rice has expanded rapidly in the past few years, from 155,000 hectares in 1993 to 248,700 hectares in 1997. In 1997 the second, dry season crop of rice accounted for 21 per cent of the total production. Another indication of improved cultivation practices is the increases in the yields of wet season rice in the past five years, which can hardly be put down solely to increasingly favourable climatic conditions. However, in the absence of consistent studies of cultivation practices over time it is difficult to pinpoint exactly the reasons behind the increase.

Improvements in agricultural performance in the past few years notwithstanding, comparisons with past performance as well as with the situation in neighbouring countries makes it clear that there is still ample scope for improvement. Thus, it is only in the past few years that rice production has even begun to approach the peak levels achieved in the late 1960s, at a time when the total population was only 55 - 60 per cent of what it is today.<sup>40</sup>

**Table 4.6**  
**Cambodia's Rice Production in a Regional Perspective.**

	Cambodia	Thailand	Vietnam	Malaysia	Philippines	Indonesia
Rice production, 1,000 tons 1996	3,390	21,800	26,300	2,065	11,284	51,165
Yield, kg/ha 1996	1,739	2,364	3,603	3,129	2,856	4,515
Rice production/capita in 1993, kg	330	371	350	100	163	255
Chemical fertiliser use, kg/ha, 1995/96	2.3	71	214	164	63	83

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

*Source:* FAO (1997a: 3-15, 27-31, 70-71); FAO (1997b: 120-122).

<sup>40</sup>In 1969/70 rice production peaked at 3.8 million tonnes, an increase by 1.5 million tonnes since six years earlier. However, yields were considerably lower than today, as the cultivated area was larger (Nesbitt, 1996: 7-9).

As may be seen from Table 4.6, Cambodia remains behind most neighbouring countries in terms of rice yields as well as use of agricultural inputs, such as fertilizer and irrigation. Similarly, the use of high yielding varieties of rice would appear to be much lower in Cambodia than in neighbouring countries, although recent comparable data is hard to find.

At the heart of the problem lies the need for a transformation from a primarily subsistence oriented agriculture, characterised by low use of cash inputs and low returns to land, to a more commercially oriented and more intensive agriculture. The scope for such a transformation remains large, but there are also major obstacles, ranging from the poor physical infrastructure resulting in high transport costs and poor market integration, to the low levels of education and the poor state of health. Overcoming these bottlenecks will be the main key for achieving sustained rapid economic growth based on expansion of increasingly productive employment opportunities.

## **4.2 Lack of Productive Assets**

An obvious cause of poverty is inadequate endowment of, or access to, productive assets. Not only land, but also physical and human capital, are important in this respect. Each will be discussed in turn in this section.

### ***Land***

With little more than 50 inhabitants per square kilometre, Cambodia is one of the more sparsely inhabited countries in developing Asia. Yet, contrary to common belief, Cambodia does not have an abundance of agricultural land relative to its population. Much of the country is very sparsely populated and unsuitable for intensive agricultural production. Some 70 per cent of the rural population is concentrated to 30 per cent of the land, stretching from a lowland corridor from the Thai border in the west, through the country to the border with Vietnam in the south east, with the great lake, Tonle Sap, and the Mekong river in the centre. Less than a fourth of the area of the country is cultivated. Although exact information will not be available until the census returns have been processed, a rough estimate indicates that there is an average of slightly more than two hectares of cultivated land per rural household or 0.4 hectares per rural dweller. While this figure might suggest that the overall situation with regard to population pressure on land is not so acute, a number of factors make the actual situation a lot grimmer.

Firstly, as has already been emphasised, the population is increasing very fast and will continue to do so in the foreseeable future. The population forecasts for 2010, already quoted, imply, if the rural/urban population ratio remains unchanged, a reduction in the average amount of cultivable land per rural dweller by more than 30 per cent.

Secondly, there are large regional differences in the land/labour ratio. According to the Cambodia Land Cover Atlas of 1994,<sup>41</sup> there was already in 1992 less than 0.3 hectare of cultivated land per inhabitant in the most heavily populated provinces; Kandal and Kampong Cham. A survey in 1997 came up with similarly large differences in the land/population ratio. Thus, in 1996/97 the paddy land per capita ranged from 0.34 hectare in Svay Rieng province to 0.05 hectare in Kandal and 0.1 hectare in Kampong Cham and Kratie province. In most provinces it ranged from 0.22 to 0.27 hectares per person. In many areas there is scope for increasing the cultivated area, either through cultivation of new land or double cropping.

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<sup>41</sup> UNDP/FAO (1994: 7)

However, security problems and lack of irrigation and water control, to mention but two factors, imply that this may not always be a straightforward option.

At a more detailed level, a survey by the World Food Programme in 1997 led to the conclusion that one in seven communes face chronic overall food shortage and that more than a third of the communes had a significant chronic deficit in rice production.<sup>42</sup> Unless, agricultural production will increase at pace with the population in the future, which past records give little reason to believe, these numbers are likely to increase substantially in the years to come.<sup>43</sup>

Thirdly, the most worrying and least documented factor is the unequal access to land and common property resources within individual communities in rural areas. In 1989 the Council of Ministers issued Instruction No. 3 on the Principles for Possession and Use of Land, which effectively privatised land ownership following decollectivisation, allowing each household up to five hectares of land for cultivation. Since then there has been no large scale survey or study on the issue of land distribution or access to land in general. The issue is either mentioned only fleetingly or not at all in recent analyses of standards of living, poverty and rural development. Thus, although the main socio-economic surveys of 1993/4, 1996 and 1997 collected data on land holdings, the studies published to date based on these surveys have not included any analyses of this issue. Similarly, the World Bank agricultural sector memorandum of 1996, confines the discussion on land tenure to the problem of the slow issuing of land titles.<sup>44</sup>

There seems to be an implicit assumption that the land reform in 1989 solved once and for all the problem of land distribution and access to land. The amount of land distributed under the reform varied according to location and the criteria for distribution also varied from district to district. Households headed by women received less land than those headed by men, as the number of able-bodied adults in the household was used as a criteria for land allocation. Moreover, there is ample empirical evidence from elsewhere that a process of quite rapid land differentiation and pauperisation is likely to follow from a land reform in a situation where the majority of the land holders receive fairly small amount of land and remain close to the poverty line, particularly when this is accompanied by a high rate of population growth and sluggish growth of agricultural production.<sup>45</sup> The two main mechanisms behind the increasingly unequal distribution of land are fragmentation of holdings when they are handed over from one generation to another and sale or loss of land to meet either current expenditure for basic needs or large occasional expenses, such as for weddings or in case of illness.

Recent case study data provide convincing evidence of a rapid process of land differentiation and pauperisation in Cambodia today. The probably most conclusive evidence is provided by the recent project on food security undertaken by CDRI and UNRISD.<sup>46</sup> The field data generated by this study in three villages revealed that the top ten per cent of the households (in terms of income) owned third of the land, while the bottom 20 per cent had less than 4 per cent of the land. The Gini coefficient of land distribution was found to be as high as 0.47 for cultivated land. Another study in the same year by the Ministry of Rural Development and the World Food Programme found that about half of the villages in the

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<sup>42</sup> WFP/FAO (1997: 7). 201 respectively 487 out of 1391 communes.

<sup>43</sup> This is not to say that each village has to be self-sufficient in rice production, or even that this would necessarily be desirable. A diversification and local specialisation in agricultural production is a natural and welcome development following from an improvement of rural markets and an integration of the rural economy.

<sup>44</sup> World bank (1996b).

<sup>45</sup> Cases in point are Romania and other East European countries in the interwar period.

<sup>46</sup> Murshid (1998); McAndrew (1998).

country had households which had never received any land and that 4.4 per cent of the rural households had not received any land at all.

Sale of land and loss of land following failure to pay back loans was identified as an important factor behind the land differentiation. During the five years prior to the CDRI survey 11 to 13 per cent of the land changed hands, to the net benefit of the richer households. The unequal distribution of land was compounded by large differences in the possession of animals. The top ten per cent of the households (in terms of income) owned 30 per cent of all animals, while the bottom 20 per cent possessed as little as 0.4 per cent of the animals. Unforeseen expenses resulting from illness would appear to be one of the more common reasons for loss of land.<sup>47</sup>

The internally dislocated people and returned refugees are particularly handicapped with regard to access of land as the land distribution in most cases had been completed by the time they returned to their home village. In 1992 there were some 320,000 returned refugees in Cambodia and an additional 200,000 internal refugees.<sup>48</sup> Despite efforts by the UN and the Government to reintegrate them and to provide them with land, in particularly in the Western provinces, it is clear that many remained, and remain, with little or no access to land.

It would appear that the increasingly unequal access to land is severely aggravated by *de facto* privatization of common property resources. There is ample anecdotal evidence of private expropriation of common property resources, such as common grazing grounds, ponds and water resources. This affects the poor particularly hard as, with little land of their own, they are especially dependent on these resources for their livelihood.

From the point of view of poverty alleviation, the increasingly unequal access to land and the increasing landlessness and near-landlessness is very serious indeed. One of Cambodia's main developmental advantages has been the near universal and fairly equal access to land among the rural population. It would appear that this advantage is rapidly being lost. Combined with a loss of access to common property resources it implies that an increasing number of rural households remain without any productive resources, except their own labour. It also means that these households will not derive any benefits from an overall intensification and improvement of agriculture. Indeed, the risk that they will be left entirely outside the mainstream of economic development is very large indeed. Preventive measures, focusing on halting the process of pauperization of parts of the rural population, are likely to be much more effective than any subsequent attempts to revert it and to bring the landless and near landless back into the mainstream of development.

## ***Capital***

Most rural households have little capital, either in the form of money or physical assets. Furthermore, there appears to be a strong correlation between lack of capital and lack of animals. The same is also true for transport equipment, machinery and other durables.

Although rice production is a major base of the Cambodian economy, it is largely dependent on weather changes because only about 16 per cent of the total area cultivated with rice is irrigated. Yields from irrigated crops are 150 - 200 per cent higher than rainfed crops.<sup>49</sup> For instance the average rice yield for all provinces was 1.6 ton/hectare for rainfed crops and

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<sup>47</sup> McAndrew (1998: 4); Murshid (1998: 82-88).

<sup>48</sup> Greve (1993: 27-29); World Bank (1994).

<sup>49</sup> Rickman *et. al.* (1995).

3.3 tonnes/hectare for irrigated crops. A survey of 197 farm households revealed that only about 10 per cent of the farmers owned an irrigation pump.<sup>50</sup>

Farm power, most of which is draft animals, is a major capital investment of farmers. Its share has been found to be as high as 75 per cent of total capital investment in farm mechanisation.<sup>51</sup> Some 79 per cent of the farmers interviewed owned at least a pair of draft animals, but only 1.5 per cent owned a tractor, while the rest did not own any power source. The latter relied on contracting out the cultivation tasks that requires access to power.

Access to rural credits is essential in order to improve the endowment of farm households with productive capital. However, the formal rural credit system is still relatively underdeveloped. Since 1995 the official Credit Committee for Rural Development, under the supervision of the Ministries of Rural Development, Agriculture, Fisheries and Forestry, and Economy and Finance, the Council for the Development of Cambodia and non-governmental organisations have been responsible for improving the efficiency of rural credit, strengthening the institutionalisation of private and NGO lending institution, and mobilising resources from foreign donors. More recently, in 1998, the National Bank of Cambodia has set up the Bank for Rural Development, responsible for improving micro finance arrangements, supporting the refinancing of existing credit operators, and studying the possibility of meeting credit needs in areas where there is no credit operator. Among NGOs and international organisations involved in rural credit are ACLEDA, GRET, PRASAC, CARERE, UNICEF and CRS. However, only about ten per cent of the population is estimated to have access to such credit schemes.

Despite the poor development of formal credit institutions in Cambodia, most households are involved in the credit market. The CDRI/UNRISD food security study revealed that the percentage of households with loans at the time of the survey varied from 63 to 92 per cent between the surveyed villages<sup>52</sup>. For the poor households the percentages with outstanding loans was uniformly high and ranged between 89 and 94 per cent. However, although it would appear that the poor as well as those better off have access to credit, the terms of credit are very much worse for the poor. While it is understandable, though lamentable, that credits may be more expensive for the poor as they represent a greater risk to the lender, the differences in the costs of credit revealed by this survey are truly staggering. It was found that the average interest rate ranged from 53 per cent for the 'rich' households to 170 per cent per year for the 'very poor' households.<sup>53</sup> With such terms of credit, it is clear that the rural credit market in Cambodia today does not provide a source of capital for the poor by which they may be able to increase their productive capacity, but a source and a mechanism of impoverishment. This is further underscored by the fact that most credits taken by the poor are 'distress loans', taken to meet the cost of acute needs rather than for investment (Table 4.7)

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<sup>50</sup> *Ibid.*

<sup>51</sup> *Ibid.*

<sup>52</sup> Murshid (1998: 69).

<sup>53</sup> *Ibid.*

**Table 4.7**  
**Use of Loans. Percentages.**

Category	Borrowing households	Rice purchase	Health treatment	Other purpose
Very poor	95.2	70	20	10
Poor	66.7	62	16	22
Marginal minus	81.8	40	17	43
Marginal plus	46.6	27	12	61
Well off	71.7	11	9	80
Rich	32.0	0	0	100

*Remark:* Borrowing households refers to households taking loans in the past four months. The division of the households into categories was based on five main indicators; land ownership, adjusted for productivity, ownership of transport, machinery and consumer goods, animal assets, housing conditions and dependency ratio.

*Source:* Murshid (1998: 70).

### ***Human capital***

Education and health care are the most basic contributors to the accumulation of human capital and both are crucial preconditions for economic progress, for society as a whole as well as for the individual. Each will be discussed in turn in this section.

#### *Education.*

Cambodia has a particularly difficult legacy in the area of education, as the entire educational system was effectively destroyed during the reign of the Khmer Rouge. At the time of the fall of the Khmer Rouge in 1979, all formal education in the country had practically ceased to function. There were virtually no trained teachers left in the country, the majority of the schools had been destroyed and there was a total lack of books and educational materials.<sup>54</sup> Cambodia has made remarkable recovery and advances in the field of education since then. Today, there are a total of 6,100 schools in the country, with some 62,000 teachers and 2.3 million pupils.<sup>55</sup> Recent surveys also suggest that the literacy rate is rather higher than previously expected. According to the 1997 socio-economic survey, some 68 per cent of the population over the age of ten can read or write a simple message.<sup>56</sup> The coverage of the education has been remarkably broad, with the result that about two thirds of the adult population today state that they are literate. However, the depth of the education still leaves much to be desired and most of the literate population have only received very rudimentary formal education.

<sup>54</sup> World Bank (1994:114).

<sup>55</sup> *Education Indicators 1996/97* (1997:1).

<sup>56</sup> *Socio-Economic Survey of Cambodia 1996* (1997: 65). Only a year earlier, the World Bank estimated literacy at 35 per cent in the publication *Social Indicators of Development*.

**Table 4.8**  
**Population Aged 25 or More by Educational Level.**

Level of education	Whole country			Rural areas		
	Both sexes	Male	Female	Both sexes	Male	Female
No schooling	37.5	23.2	48.9	40.4	25.7	52.2
Primary (grade 1-6)	40.0	44.4	36.6	41.5	47.6	36.6
Secondary (grade 7-9)	14.7	21.1	9.7	12.7	19.1	7.6
High school (grade 10-12)	4.8	7.6	2.5	2.8	4.6	1.3
Technical/vocational	0.3	0.6	0.1	0.1	0.2	0.0
University	0.5	0.9	0.1	0.1	0.2	0.0
Other	0.9	1.3	0.5	1.0	1.6	0.6
Not stated	1.3	1.0	1.6	1.4	1.0	1.7
Total	100.0	100.0	100.0	100.0	100.0	100.0

*Remark.* The figures for each level include dropouts who commenced but did not complete the level.

*Source:* Socio-Economic Survey of Cambodia 1997.

By regional standards, the educational level in Cambodia remains very low. Within South East Asia, Cambodia together with Laos stand out as having the by far lowest educational level. The importance of education beyond the most rudimentary level as a precondition for sustained economic development and for a broad based improvement in living standards is empirically documented beyond any doubt. In all of the neighbouring countries that have registered sustained growth over the past decades, sharp increases in the educational level of the population have gone hand in hand with growth. It should be noted that the link is as strong with regard to development of agriculture as it is with industrialisation. In the context of the acute need to rapidly increase productive employment opportunities, not least in agriculture and in the rural economy, discussed above, the poor educational level of the Cambodian people appears as something of an Achilles' heel.

The achievements in education, although impressive, give little comfort for the future. Although the coverage of education in Cambodia in terms of the number of young persons who at one point or another have attended school is rather good, the quality and quantity of the education which most of them have received leaves much to be desired.

As can be seen from Table 4.8, some 38 per cent of the adult population have no schooling at all, and in both urban and rural areas the proportion of females who have no schooling is more than double that for males. Some 78 per cent (82 per cent in rural areas) have no more than some primary schooling, and less than 6 per cent have any more than lower secondary schooling. Hence, although reasonably comprehensive in coverage, formal education has on the whole been rather shallow. The majority of the population has only received very rudimentary formal education, which more often than not will have been barely enough to obtain basic literacy and numeracy skills, let alone sustain them. The high literacy figures reported in recent surveys should be seen in this light.

The very high dropout rates, particularly in the lower grades (shown in Table 4.9), aggravate the situation considerably. In the 1996/97 academic year half of the pupils in grade one did not successfully complete the grade but either dropped out of school completed or were forced to repeat the grade. In subsequent grades between 30 and 40 per cent of the pupils failed to be promoted to the next grade. The situation is worse in rural areas than in urban areas and particularly bad in remote areas, such as Mondulhiri and Ratanakiri, where only 20-30 per cent of the first grade pupils were promoted to grade two.

**Table 4.9**  
**Dropout and Repetition Rates in 1996/97.**

	Promotion	Repetition	Dropout
Grade 1	50.0	42.7	7.4
Grade 2	61.6	29.5	8.9
Grade 3	68.0	21.5	10.5
Grade 4	73.6	14.8	11.6
Grade 5	55.8	25.0	19.2
Grade 6	84.8	3.5	11.8
Grade 7	82.1	3.5	14.4
Grade 8	35.4	27.0	37.6
Grade 9	90.1	1.5	8.4
Grade 10	98.0	1.6	0.4
Grade 11	26.4	22.2	51.4

*Source:* Education Indicators 1996/97 (1997: 19-21).

The extremely high repetition rates and the high dropout rates in primary school would appear to be due to a number of reasons. There clearly remains a problem of the quality of both schools and teachers. It should come as no surprise that the emphasis on mass education since 1980 has, by necessity, taken place at the expense of quality. The lack of trained teachers has meant that the level of qualifications required for appointment as a teacher has been much lower than desirable. Of the 43,000 teachers who served in the primary school in 1992-93, only one per cent had education corresponding to upper secondary school level, while the main part (60 per cent) had completed eight grade. Primary education also suffer from a rather high number of pupils per teacher and per class (Table 4.10). The much lower pupil/teacher ratio in secondary education partly reflects the low number of students in secondary education, but also suggests a mismatch between teachers and pupils across levels. In light of the high dropout rates in primary education and the obvious benefits of small classes and a high teacher density in the lower grades, a strong case can be made for channelling more resources to these grades.

**Table 4.10**  
**Teaching Facilities in 1996/97.**

	Pupils/ school	Teachers/ school	Classes/ school	Pupils/ teacher	Pupils/ class	Classes/ classroom
<i>Area:</i>						
Whole country	372	10.1	8.5	36.9	43.6	1.4
Urban areas	779	24.0	17.0	32.5	45.7	1.5
Rural areas	317	8.2	7.4	38.6	42.6	1.3
Remote areas	199	4.1	4.6	48.4	43.7	1.2
<i>Level:</i>						
Primary	392	8.8	8.9	44.4	44.1	1.4
Lower secondary	591	31.9	14.0	18.5	42.2	n.a.
Higher secondary	582	24.6	12.9	23.7	45.0	n.a.

*Source:* Education Indicators 1996/97 (1997: 1-2).

However, there are also other, less excusable, reasons behind the inadequate quality of education. The proportion of recurrent government expenditure allocated to education has decreased from 18.4 per cent in 1989, to 11.1 per cent in 1995 to 9.9 per cent in 1997. In absolute terms, the allocation in 1997 amounted to a mere 9 USD per pupil. This level of

expenditure does not even allow for maintenance of the educational system built up in the 1980s. Teachers' salaries are barely at the subsistence level and most schools receive little or no funds for other recurrent expenditure. It is estimated that only a quarter of the cost of the educational system is currently met by the state budget, while the rest is covered by, primarily, the parents of pupils, but also by NGOs and international assistance.<sup>57</sup> The 1996 socio-economic survey revealed that the main reasons for dropping out of school among children aged 5-17 years were "to help with household chores" (16.4 per cent), "lack of interest" (16.3 %) and "to earn money for the household" (15.1 per cent). The opportunity cost affected the girls more than the boys. Among the female dropout, economic reasons were stated in 43.0 per cent of the cases.<sup>58</sup> This clearly suggests that poverty is, in itself, a main reason behind the high dropout rates and that poverty is perpetuated as it is the poor who dropout of school prematurely.

The very high repetition rates, particularly in primary school, aggravates the problem considerably. The additional cost of education to society and, in particular, on the individual parents of the high repetition rates are very large indeed. For society it implies a substantially increased burden on an already overstretched educational system and foregone production as school leavers enter the labour market later and with much less formal education than would otherwise be the case. For the individual parents it means that the very heavy direct and indirect costs of education have to be supported for a much longer time than would normally be the case. Furthermore, there can be little doubt that the high repetition rates are a main contributing factor to the high dropout rates.

There would seem to be several reasons behind the high dropout rates. Poor quality education, coupled with sometimes poor attendance, is clearly an important factor. To this may be added the rather few hours of effective education per week. In 1994 the average number of effective school hours was only 15 hours per week during the first grades.<sup>59</sup> The system of education and what might somewhat loosely be called "a culture of repetition" clearly also contributes. In short, efforts to bring down the repetition rates by simultaneously addressing its various causes should be given high priority.

The socio-economic survey of 1997 as well as experiences from elsewhere in the region clearly demonstrate the favourable impact both on society at large and on the individual of increased secondary education. For the individual secondary education substantially improves the expected life earnings and reduces the risk of poverty, while for society widespread secondary education is more or less a prerequisite for sustained economic development.

While there is clearly a need to develop the system of secondary education, particularly in the rural areas,<sup>60</sup> the main problem would seem to be that so few pupils ever qualify or, because of repetitions, only qualify for secondary education after an excessive number of years at school. Thus, the reasons for the poor coverage of secondary education are to a large extent to be found in the system of primary education.

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<sup>57</sup> UNDP (1997:44-45). A recent study on the private cost of schooling found that the average parents' annual expenditures on primary education in six provinces and in Phnom Penh ranged from 263,500 riels for first grade to 458,300 riels for sixth grade (Bray, 1998:19).

<sup>58</sup> These included, "to help with household chores", "to earn money for the household", "to assist in household enterprise", and "to work to support itself". The corresponding percentages for male drop outs was 30.0 per cent (Socio-Economic Survey of Cambodia 1996 [1997: 81]).

<sup>59</sup> World Bank (1994:116)

<sup>60</sup> The 1997 socio-economic survey showed that in rural areas absence or long distance to a secondary school was considered to be the main problem associated with secondary education (Socio-Economic Survey of Cambodia 1997 [1997: 153-154]).

In addition to education, training can also contribute to productivity increase, with agricultural extension playing a potentially crucial role in the an economy like Cambodia's. Agricultural extension is very weak and a relatively new concept in Cambodia. There were no specialised courses in this field until 1991 when the Australian Catholic Relief introduced the subject through training the existing agricultural agents and technicians. Diploma and degree graduates in various agricultural specialisations from the School of Agriculture Prek Leap and the Royal University of Agriculture have been employed by the government and posted at mostly ministerial and provincial departments. Too few of them have been stationed at the district or commune level, where they can provide consultation directly to the farmers. The mostly destroyed rural roads, combined with the government's lack of transportation, severely limit the mobility of the agricultural agents and newly trained extension workers, who receive little salaries from the government. Thus farmers have very limited access to extension services. In the absence of technical institutions available to them, farmers instead keep relying on traditional methods and techniques for their subsistence farming.

The Australian Agency for International Development (AusAID), in co-operation with the Ministry of Agriculture, Forestry and Fisheries (MAFF), has undertaken an extensive agricultural extension training programme. A large amount of agricultural technicians working in provincial and district departments have been invited to join the programme and appointed back in the fields as extension workers with partial financial support for travelling. About 500 agricultural staff have now been trained in agricultural extension. According to MAFF officials, these trained workers are not functioning well because of their poor salaries.

### *Health Care*

Health is linked to poverty in several ways. Poor health impairs the ability to work and to earn income. It is also often a cause of very high expenditure for the household concerned. Thus, lack of health is an important cause of poverty. However, it is also often an effect of poverty, as the poor are more exposed to and predisposed to illness than those who are better off.

There is ample evidence that the health situation in Cambodia is precarious. Infant mortality remains among the highest in the region, at about 90-115 per thousand live births, and the average life expectancy among the lowest (54.4 years).<sup>61</sup> The 1997 socio-economic survey revealed that 14.7 per cent of the surveyed individuals had been ill in the preceding month, suggesting an illness prevalence rate of about 1.8 episodes per year.<sup>62</sup> This is corroborated by CDRI/UNRISD food security survey which showed that between 40 and 50 per cent of the surveyed households had suffered severe illness in the past year.<sup>63</sup>

That illness is a common and severe reason behind the inability to work is obvious, although lack of data makes it difficult to quantify. One of the few estimates available suggests that on average between 7.6 and 18.7 days of work are lost over a three months period per household.<sup>64</sup>

Expenditure related to ill health are often more devastating to the individual household than the loss of income from work. Analyses based on the 1997 socio-economic survey bring out a truly grim picture. It was found that a visit to a commune clinic or health centre cost on average 56,462 Riels (16 USD), while inpatient services cost three to four times as much.

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<sup>61</sup>UNDP (1997: 50-51).

<sup>62</sup>World Bank (1998: 37-38).

<sup>63</sup>Murshid (1998: 83).

<sup>64</sup>Murshid (1998: 84).

Self-medication, involving purchase of drugs directly from a drug vendor, was found to be the least expensive option, costing an average of only 26,112 Riels (7.50 USD) per visit. The average cost of treating illness by a visit to a 'health provider was 75,272 Riels (21.50 USD).<sup>65</sup> For the poorest quintile of the population these costs were lower, largely because they opted for cheaper forms of treatment.<sup>66</sup> Fees made up on average 62 per cent of total health expenditures, while drugs accounted for another 33 per cent. This cost pattern was true also for outpatient services offered at commune clinics and district health centres, and for all income groups, even though such consultation should in principle be free of charge. Clearly, there is no such thing as free health care in Cambodia. Indeed, informal fees paid for what is supposed to be free services at public clinics are almost as large as the fees paid for health services in private clinics.

The cost of medical care in case of illness is exorbitant for the poor. Thus, the cost of a single outpatient visit to a health clinic equals half of the average yearly non-food expenditures of the poorest quintile of the population, while the cost of a hospitalisation would amount to more than six years of non-food expenditure for the same group.<sup>67</sup> The consequences of these high relative costs are, firstly, that adequate health care remain unaffordable to the poor and, secondly, that when health related expenditures indeed become necessary they have a devastating effect on the budget of the household concerned. Although outpatient visits to health clinics are presumably free of charge, the survey showed that fee exemptions for health services were given very sparingly and, which is even more remarkable, less often to the poor than to the rich. Thus, only 2.9 of those in the poorest quintile who had made use of public health services reported that they had been excepted from paying any fee, as against 27.4 per cent of those belonging to the highest quintile.<sup>68</sup>

Evidence from case studies suggests that expenditure related to illness are often a main factor behind indebtedness and subsequent loss or sale of land. Thus, it would appear that illness often acts as a catalyst, depriving households of the productive assets and driving them into poverty. Once deprived of their land and other productive assets, these households will find it extremely difficult to improve their material situation again.<sup>69</sup>

While loss of income due to inability to work may be a near-avoidable effect of illness, the heavy direct health related expenditures are not. One cannot escape the conclusion that a financially more realistic and transparent health system than the present one, which on paper provides free health care to everybody but in reality inflicts high costs on the patient, would be a most effective means of preventing poverty, as well as to ease the plight of those who are already poor. Such a system would no doubt have to be partly financed through consumer fees, but should involve a system of subsidisation or cross-subsidisation of the poor.

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<sup>65</sup>World Bank (1998: 17-18).

<sup>66</sup>The average cost to of an outpatient visit to a public health clinic for this category was 31,218 Riels and the average cost of hospitalisation was 370,225 Riels.

<sup>67</sup>The average yearly non-food expenditure of the poorest quintile of the population in 1997 was 60,900 Riels, to be compared with 31,218 Riels for an outpatient visit to a health clinic for the same group and 370,335 riel for hospitalisation (World Bank, 1998: 17-18).

<sup>68</sup>World Bank (1998: 23).

<sup>69</sup> Murshid (1998: 84-86).

## **Insecurity, Lack of Rule of Law and of Protection of Property Rights**

Contrary to what is often believed, protection of property rights and upholding the rule of law are not primarily means of protecting the assets of the rich, but are of utmost importance to protect the legitimate rights of the economically and socially vulnerable. While the rich typically have both the economic means and the necessary influence and contacts to protect their interests, the poor do not. The poor are more dependent upon the protection of the society in the form of rule of law and impartial protection of property rights.

Although hard empirical evidence is by and large lacking, there are strong indications that shortcomings in the rule of law and protection of property rights are a strong contributing factor to poverty in Cambodia.

In the wake of decollectivisation in 1989 and, in particular, since the 1993 elections when contesting political parties made promises concerning land redistribution, the number of land disputes has risen dramatically and has in many areas become a serious problem: in Prey Veng, for instance, 80 per cent of court cases concern land.<sup>70</sup> These disputes are typically between families over possession of a house or a farming plot, claims for recovery by dispossessed pre-1975 land owners, illegal sales of land, and forceful appropriation of land.

Decollectivisation of agriculture and privatisation of previously collectively farmed and held land almost invariably result in subsequent land disputes. Inadequate cadastral capacity and long delays in the issuing of land titles aggravates the problem. This is very much the case in Cambodia. Although the Land Law states that “land must be registered in the cadastral office so that individual can get land titles”, many people in rural areas still hold only a “certificate of land use and possession” issued by local authorities or a “receipt” given by the land office as evidence of ownership. The Cadastral Department, under direct supervision of the Council of Ministers, does not have enough resources, financial or technical, to prepare national cadastral maps. In 1994 in the face of over 4 million applications for land title in the whole country, only 370,000 had been issued. At the same time, land grabbing by the local power elite or the army is already a severe problem and may well worsen as large parts of the army are demobilised. Insecure access to land is an obstacle to development as the holders will be disinclined to make long term investments in land improvement and in crops with longer gestation periods and is also likely to hurt the poor disproportionately as they lack the means of protecting their rights.

Illegal privatisation and monopolisation of the right of access to common property resources, such as common pastures, ponds, rivers, fishing rights and hunting and gathering rights in forests, invariably hurt the landless or near landless exceptionally hard. Although the magnitude of this problem remains poorly documented, there is ample case study evidence that it is reaching alarming proportions in Cambodia today. The CDRI/UNRISD food security study found that the landless poor have nothing to rely on except their access to common property resources and the sale of their labour.<sup>71</sup> Some are becoming virtually full-time hunter/ gatherers, at a time when the more productive water-bodies are being leased out to powerful commercial interests, with large fixed payments required from fishermen, and payments are also demanded for access to forests. Migration in search of wage jobs is becoming desperate in some places, with women in particular taking on heavy work in agriculture, construction and pond-digging in order to pay off loans.

Another side of the same problem is the depletion of common natural resources in the form of deforestation, over-fishing etc. The problem of illegal logging and of deforestation in

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<sup>70</sup> Thong Sokha (no date).

<sup>71</sup> Murshid (1998).

general in Cambodia is widely recognised and is the subject of studies as well as policy discussion. The forest coverage of 13.2 million hectares (73 per cent the of country) in 1969 was reduced to 10.6 million hectares (58 per cent) in 1997. The most intensive deforestation appears to have occurred in the last few years (1993-97). In this period, deforestation reached another 700,000 hectares, accelerating the annual rate to over 180,000 hectares. If this rate is maintained, the rest of some 10 million hectares of forest areas will be totally depleted in less than 60 years.<sup>72</sup> It is estimated that of the total land deforested in the past five years, 345,000 hectares were relegated to shrublands, and a similar amount converted to agriculture.

This formidable destruction has had direct consequences for rural economic well being. Cambodia's fisheries have greatly suffered from the loss of spawning areas and sedimentation caused by deforestation (see below). Crops have become more exposed to increased floods and droughts. As already discussed in chapter one, hundreds of thousand tons of crop production per annum were lost in the past five years, mainly due to floods and droughts.

While part of the blame was placed on rural people whose poverty forced them to convert forest land to arable land, greater misconducts are reported to have been committed by the Cambodian government and powerful individuals. The government must take responsibility for the predominance of illegal logging as a source of informal funds, lack of control over logging by the underpaid military, and official permission given for over-capacity in log processing.

Over-fishing, too, is arising as an increasingly acute problem. Many poor rural Cambodians rely largely on catching fish (consumption of which accounts for about 75 per cent of protein intake) from common rivers and lakes for the main part of their diet. However, with ineffective enforcement of fishery laws, Cambodia's abundant fish have been over-exploited and some aquatic species have disappeared while others are at risk of extinction.

**Table 4.11**  
**Total Amount of Fish Caught in 1993 - 1997.**

	1993	1994	1995	1996	1997
	<i>Tonnes</i>				
Total fish caught	108,900	103,200	112,510	104,310	29,500
Fresh water fish caught	67,900	65,000	72,500	63,510	3,500
Maritime fish caught	33,100	30,000	30,500	31,200	26,000
	<i>% Change from Previous Year</i>				
Total fish caught		-5.2	9.0	-7.3	-71.7
Fresh water fish caught		-4.3	11.5	-12.4	-94.5
Maritime fish caught		-9.4	1.7	-2.3	-16.7

*Source:* Agricultural Statistics (various issues).

With the exception of 1995, the amount of fish caught that were officially recorded decreased drastically during the period 1993-1997, as Table 4.11 shows. Sad to note, the 1997 production year saw a catastrophic decline in the catch. The reasons include the over capacity of fish exploitation, the use of illegal and dangerous tools, the consequences of rapid deforestation and incapable managing institutions.

As already indicated, deforestation, especially the act of clearing land surrounding lakes by farmers, has destroyed important pawning fish land. The subsequent inundation of forest land has resulted in a decreased water depth and increased water temperature which

<sup>72</sup> Some sources estimate that in 1997 alone some 450,000 hectares were deforested. At such a rate, the entire forest would be depleted in little over twenty years.

affect fish reproduction negatively. Furthermore, deforestation has caused soil erosion and sedimentation in the Mekong and Tonle Sap rivers, inducing a build up of silt deposit at the junction of the two rivers. This build up of silt and sediment prevents a large proportion of fish from migrating from the Mekong river into the Tonle Sap lake to mature. Instead they are swept down the river to die in the saline waters in the Mekong delta.

According to fishery officials, dangerous illegal fishing activities are on the increase. Explosives and electric equipment are widely used to kill fish for sale and consumption. This does not only destroy fish but all other aquatic species. Those which survive are often no longer able to reproduce. Less dangerous but also undesirable is the use of illegal means to catch fingerlings and young fish that are not supposed to be caught. Some of these baby fish are caught and sold to the poor who cannot afford larger fish, but a large amount is processed into fertilisers and animal feed. Under the corrupt management, all illegal activities can go ahead as long as bribes are secured for the officials, according to fishery officials.

Beside those covered by official data, small amounts of fish are caught in rice paddies, or trapped or netted in ponds, lakes, floodwaters, streams and rivers. Many households are to a large extent reliant on access to common property resources for a big contribution to their food consumption. The sharp decline in fish output in the past few years would mean that rural Cambodians have lost one of main sources of livelihood that they have safely relied on for years.

Apart from its severe environmental consequences, over-exploitation of common resources has direct implications for poverty, as the poor find it increasingly difficult to compete for these resources at the same time as they often are heavily dependent upon them.

Theft and illegal confiscation of assets, unofficial road taxes and other levies can take proportions where they become severe constraints to overall economic development and a source of insecurity to individual households. Typically, the poor are more exposed to these hazards than those who are better off, as they have fewer means at their disposal to defend themselves and to protect their rights, assets and interests. Such harassment is not confined to rural residents, as the survey of vulnerable urban workers described in chapter two showed. For instance, since the number of porters, particularly market porters, has increased, the accommodation that is usually provided to them is insufficient, so some have to sleep in front of houses, usually those belonging to the owners of their two-wheel carts. They report that they are targeted as potential trouble makers by the mobile police, and arrested or fined 15,000 riels per head. Similarly, ferry porters report that they have to pay 50 percent of their daily gross earnings to the captain of workers at the ferry headquarters, and cyclo drivers and vegetable traders are constantly chased from their places of business by police and market authorities.

The factors discussed above not only make the poor poorer, but are also effective obstacle to the enrichment of the poor and to the upward mobility of the rural population in general. This is because enrichment, even from a very modest level, increases the exposure to these hazards at the same time as the ability to guard against them does not increase. The lack of hard evidence and documentation of the severity of these problems in Cambodia today should not be taken as an excuse for ignoring them.

#### 4.4 Targeted Anti-Poverty Programmes

How far can targeted anti-poverty programmes, of which there are many in Cambodia, alleviate the situation described in this chapter? A recent study reviewed the experience of six such programmes and tried to draw lessons from them.<sup>73</sup>

It found that, in most cases, the economic impact of the programmes on village output and incomes was, so far, disappointing. The most striking material benefits came from irrigation canals, but gains from their use were not always distributed equally. Roads, wells, ponds and health centres distribute benefits to all. The building of schools made it possible for more children to attend class, but the children of the poorest often could not afford to stay in school. The impact of infrastructure improvements on rice and vegetable production was sometimes diminished by lack of agricultural extension. The medium-to-better-off were the primary beneficiaries of loan schemes. The results of establishing rice banks for vulnerable villagers in unproductive areas were disappointing. In general, loans (whether of rice or money) were used as subsidies to subsistence rather than as means of transforming livelihoods. Of the three strategies adopted for reaching the poorest, the least effective was that of assisting the entire community and hoping for trickle down; a second strategy of working in remote and impoverished areas was more effective, particularly when combined with infrastructure projects that provided direct benefits to the poorest, such as the construction of wells. As for projects specifically designed for the poorest, few had been attempted, and even fewer had been successful.

The study concluded that programmes should make a more concerted effort to achieve an impact on the village economy, with more projects aimed at raising productivity, particularly in agriculture. The proportion of resources devoted to investments in village infrastructure should be increased. The distribution of relatively small loans to large numbers of villagers for short periods of time will not transform their livelihoods: loan schemes need to be part of a coherent strategy for raising incomes in the local economy, and income generating projects need to be identified before loans, sufficient for the projects' requirements, are made. Rice banks are unlikely to be successful in areas where rice production is low and unpredictable. More attention needs to be paid to agricultural extension, particularly on use of irrigation water, chemical fertiliser and pesticide and protection of crops against rats, with more emphasis on mutual learning among farmers themselves. More thought needs also to be given to the development of special projects for the poorest, such as the interest-free loans offered by one agency to the landless to enable them to lease land for rice cultivation, with a view to increasing the proportion of resources devoted to such projects. For this purpose, community workers should be encouraged to spend more time in villages, working directly with the poor, rather than working exclusively through village development committees and leaders.

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<sup>73</sup> Charya (1998).



## Chapter Five

### Conclusions

The twin crises in 1997 had an immediate and dramatic effect on the Cambodian economy. The trend of fairly high rates of growth that had characterised the Cambodian economy throughout most of the 1990s came to an abrupt halt as the GDP growth fell to a mere 2.0 per cent in 1997 and actually declined in per capita terms.

The financial crisis which swept through Asia in the second half of 1997 has affected Cambodia's economy through volatility of foreign exchange rates, which have translated into price effects on the domestic market, a decline in the demand for Cambodian products in the neighbouring countries and a sharp fall in tourism. However, the impact on exports, foreign direct investments and on the balance of payment were mitigated by a rapid growth of the garment sector following the GSP derogation in July by the EU and the granting of MFN and GSP status by the US. As the financial crisis in Asia deepens, so will no doubt its impact on Cambodia's economy. The smallness and openness of the economy makes it very exposed to external shocks and, as the past year has shown, changes in foreign exchange rates tend to have an immediate and often dramatic impact on domestic prices and on competitiveness in Cambodia. More importantly, Cambodia will have to get used to the fact that it no longer benefits from a location in the most dynamic region in the world. Despite the fortuitous export openings for the garment sector, the general decline in demand in the neighbouring countries and in their importance as a source of FDI will no doubt have a dampening effect on Cambodia's economy over the next few years.

However, it was the home made political crisis which had the most severe effect on Cambodia's economy in the past year. It caused a depreciation of the local currency, a sharp reduction in consumer spending, a decline of investment expenditure and a contraction of the tourism sector. The government expenditures were also adversely affected by a temporary suspension of foreign assistance to Cambodia. With the successful implementation of the elections in July 1998, there is now some hope that this crisis may soon become little more than a parenthesis. The market reacted immediately and positively to the elections, as the riel was appreciated from 4,200 to 3,200 to the US dollar almost over night. However, the vulnerability of the economy to any deterioration in the political situation in the country should remain a lasting lesson.

While there may be grounds for a cautious optimism with regard to the macro-economic development in the coming years, provided that political stability can be achieved, there are good reasons to take a more sombre view of the overall development of the country. A major weakness of the economic development throughout the 1990s has been its narrow base. It has largely been attributed to growth in the industrial and services sectors, while the performance of agriculture has been rather lacklustre. The growth of the shares of the non-agricultural sectors in GDP has not been accompanied by any commensurate expansion of job opportunities in these sectors. On the contrary, despite the declining contribution of agriculture to the GDP, the agricultural labour force has increased not only in absolute numbers, but also in relative terms. As a consequence of the rapid growth of the country's labour force and the narrow-based economic development, labour productivity has actually been falling.

Three demographic features exert and will continue to exert a strong influence on the Cambodian economy. Firstly, the high rate of population growth exerts a pressure on the economy as a whole and on agriculture in particular to expand at pace with the population, lest per capita incomes and food production will decrease. Secondly, the very rapid growth of

the labour force, which began a few years ago and which will continue in the coming decade, puts an enormous pressure on the economy to generate productive employment opportunities for the large numbers of new entrants into the labour force. The response to this challenge, more than any factor, will determine Cambodia's future. Thirdly, a fall in the dependency ratio opens a window of opportunity, provided that the increases in the labour force are gainfully employed.

This demographic situation suggests that Cambodia faces two main scenarios. If the economy fails to generate productive employment opportunities at the pace required, as has been the case in the past years, the increases in the labour force will take place at the expense of productivity, with falling returns to labour and incomes as a result. As incomes fall, so will the ability to generate savings and investments, and parts or all of the economy will get caught in a vicious circle of falling productivity and returns to labour, from which it will be increasingly difficult to escape. Such a development would in all likelihood also result in widening income gaps. The second scenario assumes successful expansion of employment without any fall in productivity. Because of the fall in the dependency ratio, this would automatically translate into improved personal incomes, reduced poverty and an increase in the ability and propensity to save. This, in its turn, would permit productive investments in agriculture and elsewhere, resulting in increased production, improved productivity and more employment opportunities. Hence, a beneficial circle could be created, which could form the basis for sustained and broad-based growth.

As 75 to 80 per cent of the population gain their living from agriculture, the development of the agricultural sector and of the rural economy as a whole will largely determine which of these roads Cambodia will follow. In order to create a basis for sustained growth and improved living conditions, agricultural production will need to increase by at least four to five per cent per year over an extended period of time. This conclusion does not imply any disregard of the importance of the non-farm sectors. Indeed, there is a strong need for a diversification of the rural economy as well as for enhance employment creation in the urban areas. However, such a diversification can only take place in the context of a dynamic development in agriculture and with increases in agricultural production beyond subsistence levels.

Although the long term trend in agricultural production has been rather dismal since 1980, there are some encouraging signs. The most important of these is perhaps the steady increase in irrigated dry season rice cultivation, which suggests an incipient intensification of agriculture. The intensification and commercialisation of agriculture needs to be forcefully supported and promoted as the cornerstone for a strategy for sustainable development. The fact that there are indications of a beginning of an intensification of rice production should be seen in the light of the low starting point and of the formidable obstacles still facing agriculture, not least in the form of the extremely poor physical infrastructure, resulting in high transport costs and poor access to markets, and the lack of law enforcement and protection of property rights. Furthermore, the positive development of rice production in the past few years has not been matched by any similar development in other fields. Animal husbandry remains rudimentary, not least because of poor disease control, and the development of inland fishing, which is of particular importance in Cambodia, has been nothing short of disastrous.

Recent calculations suggest 36 per cent of the population live below the poverty line, placing Cambodia in the same league as Vietnam and Laos, but well below most other countries in the region. Poverty is most widespread in the rural areas; in Phnom Penh only 11 per cent of the population live below the poverty line as against 40 per cent in the rural areas.

Apart from the demographic factors discussed above and the overall development of agriculture, access to production assets – that is land, physical and human capital – and insecurity arising from the absence of rule of law are the factors with the strongest bearing on poverty. Three issues deserve particular attention in this context.

There are strong indications of rapidly increasing landlessness and pauperisation in the rural areas. The issues of land tenure and access to land have been conspicuously absent from virtually all discussions on rural development in Cambodia in the past decade. There seems to have been an implicit assumption that the land reform in 1989 solved once and for all the problem of land distribution and access to land. The indications that an increasing part of the rural population find themselves without or with little access to land are alarming and should be taken most seriously. A universal and reasonably equitable access to land in the wake of the land reform has been a major development advantage to Cambodia. The loss of this advantage implies that an increasing proportion of the rural population are left without any productive assets, except their own labour, that they will benefit little from any upswing in agriculture and risk being left outside the mainstream of economic development. Preventive measures, focusing on halting the process of pauperisation of parts of the rural population are likely to be much more effective than any subsequent attempts to revert it and deserve to be put at the top of any policy agenda for rural development and poverty alleviation.

Health care and education remain extremely under-funded, despite policy declarations that this situation should be remedied. As a result, there is a glaring contrast between the official policy of free education and health care and reality. The costs of both education and health care are today primarily born by the individual. Apart from their negative effect on living conditions in general, the poor state of education and health are also main obstacles to economic development and to poverty alleviation. The exorbitant cost for the poor of necessary medical care in case of illness appears to be a particularly serious problem. Available evidence suggests that expenditure related to illness are often a main factor behind indebtedness and subsequent loss or sale of land. In other words, unexpected but inevitable medical expenses act as a catalyst, depriving households of their productive assets and driving them into poverty. The private cost of education, too, imposes a heavy burden, not least on the poor. However, as these costs can be foreseen and are spread over a longer period of time, their primary effect would seem to be to permeate poverty and to transfer it from one generation to the next by depriving the children of poor households the opportunity of adequate education. The importance of accessible and affordable health care and education extends beyond the intrinsic value of these goods. It must be seen as part and parcel of any strategy for economic development and poverty alleviation and should be given the commensurate importance by donors and government alike.

The negative effects of the inadequate protection of property rights and upholding the rule of law on poverty as well as on the environment deserves to be highlighted. It is a major reason behind the rapid environmental degradation in the form of deforestation, over-fishing and depletion of other common resources at the same time as it no doubt contributes to poverty and worsens the situation of the poor. Its impact on poverty ranges from destruction and/or expropriation of common property resources, upon which many poor depend for their livelihood, to insecure land rights and other property rights resulting in theft and illegal confiscation of assets, to harassment by local strongmen and officials. The virtual collapse of fresh water fishing provide a compelling example of the close links between the rule of law, environmental protection and poverty.

A main conclusion of the study must be that positive development in all of areas mentioned above is essential, not only to combat poverty, but also to create conditions for sustainable and broad based economic growth.



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## **APPENDIX**

1. Monthly consumer price index in Cambodia
2. Cambodian real exchange rate against Thai bath and Singapore dollar
3. Monetary and financial sector development
4. National budget operations
5. Labour force by industry and gender in 1994
6. Number of passengers arriving at Pochentong International Airport
7. Prices of essential items in five major markets, consumer price index and inflation
8. Labour force projections 1997 - 2002
9. Disbursement of external assistance 1992 - 1997

**Table 1.**  
**Monthly Consumer Price Index in Cambodia.**

Year	Month	Index (Base: January 1995=100)			Change from previous month (percentage)			Change from previous year (percentage)		
		CPI in Riel	CPI in USD*	NER (Riel/USD)	CPI in Riels	CPI in USD* (Riel/USD)	NER	CPI in Riels	CPI in USD (Riel/USD)	NER
1994	Nov.	102	102	100						
	Dec.	102	103	99	0.1	1.1	-1.0			
1995	Jan.	100	100	100	-2.3	-3.0	0.8			
	Feb.	100	100	100	-0.1	-0.2	0.1			
	March	98	113	87	-1.4	13.1	-12.8			
	April	97	112	87	-1.5	-1.2	-0.3			
	May	97	109	89	0.1	-1.9	2.1			
	June	99	111	90	2.2	1.2	1.0			
	July	102	111	93	3.0	-0.1	3.2			
	Aug.	103	109	95	1.0	-1.2	2.3			
	Sept.	105	109	96	1.6	-0.2	1.8			
	Oct.	106	109	97	1.4	0.4	1.0			
	Nov.	105	108	97	-1.0	-1.1	0.1	3.1	6.1	-2.8
	Dec.	103	106	98	-1.9	-2.4	0.5	1.1	2.4	-1.3
1996	Jan.	103	105	98	-0.2	-0.6	0.4	3.2	4.9	-1.7
	Feb.	105	107	99	2.1	1.5	0.6	5.5	6.8	-1.2
	March	104	105	99	-1.5	-1.7	0.2	5.4	-7.2	13.6
	April	105	106	100	1.5	0.9	0.7	8.6	-5.3	14.7
	May	106	106	100	0.5	0.1	0.4	8.9	-3.4	12.8
	June	106	104	102	-0.1	-1.9	1.9	6.5	-6.4	13.8
	July	110	106	104	4.0	2.5	1.5	7.6	-3.9	12.0
	Aug.	111	107	104	0.6	0.5	0.0	7.1	-22	9.5
	Sept.	111	107	104	0.5	-0.1	0.6	5.9	-2.1	8.2
	Oct.	115	110	105	3.7	3.0	0.7	8.3	0.5	7.8
	Nov.	115	110	105	-0.7	-0.3	-0.4	8.7	1.3	7.3
	Dec.	114	109	104	-0.7	-0.5	-0.1	10.0	3.3	6.6
1997	Jan.	110	105	105	-3.5	-4.0	0.5	6.5	-0.2	6.7
	Feb.	110	105	105	0.4	0.2	0.2	4.6	-1.6	6.3
	March	110	105	105	-0.6	-0.2	-0.3	5.6	-0.1	5.7
	April	112	106	105	2.2	1.6	0.6	6.3	0.7	5.6
	May	113	107	106	0.7	0.3	0.3	6.6	0.9	5.6
	June	113	107	106	0.6	0.5	0.2	7.3	3.4	3.8
	July	121	104	117	6.8	-2.9	10.0	10.2	-2.0	12.5
	Aug.	120	102	117	-0.9	-1.6	0.7	8.6	-4.1	13.3
	Sept.	124	98	127	3.4	-4.2	8.0	11.8	-8.1	21.6
	Oct.	126	94	134	1.0	-4.2	5.4	8.9	-14.5	27.4
	Nov.	122	92	133	-2.6	-2.2	-0.4	6.7	-16.2	27.3
	Dec.	124	92	135	1.2	-0.1	1.2	8.7	-15.8	29.0
1998	Jan.	127	91	139	2.4	-1.0	3.5	15.2	-13.2	32.8
	Feb.	128	93	137	0.8	2.1	-1.3	15.7	-11.5	30.7
	March	128	93	138	0.3	-0.3	0.6	16.7	-11.5	31.9

*Remark:* CPI in USD is defined as CPI in riels divided by NER index times 100.

*Source.* CDRI calculations based on data from The National Bank of Cambodia.

**Table 2**  
**Cambodian Real Exchange Rate Against Thai Bath and Singapore Dollar (Base: 1995 = 100).**

Month	W. sale PI	W. sale PI	CPI	N. Ex rate	R.Ex rate	N. Ex rate	R. Ex rate
	Thailand	Singapore		Riels/Baht		Riels/Sin. \$	
Jan. 1997	105	101	106	105	104	109	103
Feb.	105	99	107	106	104	108	100
March	105	99	106	105	104	106	99
April	105	97	108	105	102	106	96
May	105	98	109	106	103	108	96
June	104	97	110	107	101	108	96
July	105	96	117	90	81	110	91
Aug.	111	98	116	87	83	110	93
Sept.	113	99	120	87	82	117	97
Oct.	114	100	121	86	80	120	99
Nov.	116	101	121	85	81	120	100
Dec.	118	101	120	73	71	115	97
Jan. 1998	123	101	122	65	65	115	95

*Source:* International Financial Statistics (various issues).

**Table 3**  
**Monetary and Financial Sector Development, January 1997 - February 1998.**

Items	1997												1998	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
<b>I. MONEY SUPPLY</b>														
<i>Value (billion of riels)</i>														
Broad Money (M2)	947	977	979	897	899	902	856	883	902	945	1034	1063	1107	1097
Money (M1)	338	327	333	333	332	331	339	341	349	366	382	385	385	383
Currency Outside banks	308	298	304	304	303	305	308	311	318	335	350	356	357	353
Demand Deposits	30	30	29	29	29	26	30	30	31	32	32	29	28	30
Quasi-Money	609	650	646	564	567	572	517	542	554	579	653	678	722	714
Time & Saving Deposits	9	8	9	8	10	11	11	11	10	11	13	13	14	12
Forex deposits	601	642	637	556	558	561	506	531	543	568	640	665	708	702
<i>Percentage change from previous year</i>														
Broad Money (M2)	45.9	42.3	32.1	19.9	25.2	15.8	7.0	10.3	9.5	15.9	22.3	16.6	16.9	12.2
Money (M1)	21.4	11.7	7.5	8.7	12.0	6.2	5.4	6.3	10.6	14.7	18.8	17.0	14.0	17.0
Currency Outside Banks	22.6	13.4	9.9	9.2	13.0	9.1	6.0	7.3	11.7	15.5	19.6	18.8	16.0	18.6
Demand Deposits	10.0	-2.7	-12.6	4.4	3.1	-19.2	-0.7	-3.5	-0.3	7.4	10.3	-1.3	-6.5	1.0
Quasi-Money	64.3	65.0	49.7	27.7	34.4	22.1	8.1	13.0	8.8	16.7	24.5	16.4	18.5	9.8
Time & Saving Deposits	67.9	51.3	39.3	23.6	51.6	66.7	68.5	46.5	41.9	52.1	66.8	68.2	65.3	43.6
Forex Deposits	64.3	65.1	49.9	27.8	34.1	21.5	7.2	12.5	8.3	16.2	23.8	15.7	17.9	9.4
<b>II. BANKING SECTOR DEVELOPMENT</b>														
<b>A. Deposits in Commercial Banks</b>														
<i>Value (billion of riels)</i>														
Riels	41	40	40	39	41	39	41.1	43	41	43	45	43	44	42
Foreign Currency	766	799	783	725	729	737	652	680	692	755	812	832	891	874
Total Deposits	807	839	823	764	770	776	693	724	733	798	858	875	935	915
<i>Percentage change from previous year</i>														
Riels	17.1	10.4	-6.2	5.3	8.7	-7.2	3.0	3.2	-0.4	7.0	21.9	7.2	6.0	4.7
Foreign Currency	36.6	43.9	39.8	22.2	26.8	20.0	5.5	7.6	2.2	16.1	20.4	13.7	16.4	9.4
Total Deposits	35.5	41.8	36.6	21.2	25.7	18.2	5.4	7.3	2.1	15.6	20.5	13.4	15.9	9.1
<i>Percentage share in total deposits</i>														
Foreign Currency	94.9	95.3	95.2	94.9	94.7	94.9	94.1	94.0	94.4	94.6	94.7	95.1	95.3	95.5
Riels	5.1	4.7	4.8	5.1	5.3	5.1	5.9	6.0	5.6	5.4	5.3	4.9	4.7	4.5
<b>B. Outstanding Credits of Commercial Banks</b>														
<i>Value(billion of riels)</i>														
Agriculture	17	22	21	23	24	27	23	24	25	29	25	28	27	29
Manufacturing	74	74	80	76	86	82	93	101	106	121	115	115	122	109
Service	375	380	394	407	408	413	414	426	454	476	476	508	531	534
Total	467	476	495	506	518	522	531	551	586	625	617	650	680	672
<i>Percentage change from the previous year</i>														
Agriculture	52.8	29.9	91.0	47.8	39.1	77.0	34.2	-9.7	13.4	16.6	6.4	-13.2	56.8	34.8
Manufacturing	40.5	34.6	64.7	64.5	76.3	74.3	78.3	54.2	92.1	110.1	96.2	78.9	63.6	47.5
Service	40.3	39.5	45.1	44.4	36.9	41.4	39.1	42.1	42.3	41.0	40.7	48.1	41.7	40.4
Total	40.8	38.3	49.5	47.2	42.2	47.3	44.4	40.6	47.6	49.0	46.4	48.2	45.8	41.2
<i>Percentage share in total credits</i>														
Agriculture	3.7	4.6	4.2	4.6	4.6	5.2	4.4	4.3	4.2	4.6	4.1	4.2	4.0	4.4
Manufacturing	15.9	15.5	16.2	15.0	16.6	15.7	17.5	18.4	18.2	19.3	18.6	17.6	17.9	16.2
Service	80.4	79.9	79.6	80.4	78.8	79.1	78.1	77.2	77.6	76.2	77.2	78.1	78.1	79.4

Source: Data provided by The National Bank of Cambodia.

**Table 4**  
**National Budget Operations. January - December 1997.**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	<i>Billions of Riels</i>											
<b>Total Revenue</b>	68.7	53.4	70.5	69.6	71.4	63.1	52.6	67.6	57.0	68.1	94.8	144.2
Tax revenue	48.7	37.0	55.4	49.4	52.6	48.2	33.2	54.9	42.5	48.6	50.3	76.7
o/w customs duties	31.2	23.4	35.2	27.3	28.6	28.1	18.5	31.0	25.1	28.5	27.9	42.7
Non-tax revenue	15.4	16.3	15.0	19.2	18.6	14.8	14.2	12.6	14.5	19.2	44.3	67.2
o/w forest exploitation	1.8	0.2	3.5	3.6	5.8	4.7	0.6	2.5	3.3	4.5	2.1	4.5
telecommunications royalties	6.0	6.6	4.1	9.0	5.0	3.6	6.2	3.6	7.9	10.4	5.5	15.1
Capital revenue	4.6	0.1	0.1	1.0	0.2	0.1	5.2	0.1	0.0	0.3	0.2	0.3
	<i>Billions of Riels</i>											
<b>Total Expenditure</b>	86.9	82.4	98.3	94.3	95.5	111.7	81.1	105.5	115.3	118.4	130.2	199.9
Capital expenditure	32.4	30.8	39.3	32.1	35.1	41.7	36.7	38.0	51.1	54.7	40.7	79.2
Current expenditure	54.5	51.6	59.0	62.2	60.4	70.0	44.4	67.5	64.2	63.7	89.5	120.7
o/w defence	22.0	24.8	49.2	32.5	23.9	28.7	18.6	36.8	41.9	30.0	52.8	79.3
o/w civil administration	32.5	26.8	9.8	29.7	36.5	41.3	25.8	30.7	22.3	33.7	36.7	41.4
<b>Overall Deficit</b>	-18.2	-29.0	-27.8	-24.7	-24.1	-48.6	-28.5	-37.9	-58.3	-50.3	-35.4	-55.7
	<i>Percentage change from previous year</i>											
<b>Total Revenue</b>	17.2	-18.1	23.0	10.0	23.1	5.9	-9.6	-14.5	-1.7	46.5	51.0	74.6
<b>Total Expenditure</b>	-25.7	-3.2	-23.4	-8.7	-7.1	21.5	-36.0	-2.5	42.3	41.6	45.6	17.4

Source: Ministry of Economy and Finance

**Table 5**  
**Labour Force by Industry and Gender in 1994.**

Industry Group and Area	Both genders		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Cambodia						
All industry groups	3,939,845	100.0	1,894,008	100.0	2,045,837	100.0
Agricultural sector	2,956,746	75.0	1,340,949	70.8	1,615,797	79.0
Agriculture, hunting, forestry	2,903,031	73.7	1,305,256	68.9	1,597,775	78.1
Fishing	53,715	1.4	35,693	1.9	18,022	0.9
Industrial sector	175,991	4.5	109,304	5.8	66,686	3.3
Mining and quarrying	6,778	0.2	3,006	0.2	3,772	0.2
Manufacturing	135,090	3.4	74,939	4.0	60,151	2.9
Electricity, gas and water supply	3,306	0.1	2,977	0.2	328	0.0
Construction	30,817	0.8	28,382	1.5	2,435	0.1
Service sector	807,110	20.5	443,756	23.4	363,354	17.8
Trade*	385,696	9.8	102,909	5.4	282,786	13.8
Hotels and restaurants	7,279	0.2	3,637	0.2	3,642	0.2
Transport, storage and communications	121,389	3.1	104,602	5.5	16,787	0.8
Financial intermediation	3,967	0.1	2,086	0.1	1,881	0.1
Real estate, renting & business activities	12,070	0.3	8,347	0.4	3,724	0.2
Public administration and defense	148,512	3.8	136,330	7.2	12,182	0.6
Education	63,975	1.6	45,009	2.4	18,966	0.9
Health and social work	18,204	0.5	8,527	0.5	9,677	0.5
Other community, social and pers.services	29,358	0.7	19,384	1.0	9,974	0.5
Private households with employed persons	12,673	0.3	9,962	0.5	2,711	0.1
Extra-territorial organisations and bodies	3,987	0.1	2,963	0.2	1,024	0.1

\* Wholesale and retail trade: repair of motor cycles and personal and household goods

Source: Socio-Economic Survey of Cambodia 1993/94 (1995).

**Table 6**  
**Number of Passengers Arriving at Pochentong International Airport. Phnom Penh.**

	Arrival				% change
	Tourists	Business	Officials	Total	
<i>1995</i>					
January	11,198	2,810	898	14906	
February	8,769	2,305	1,092	12,166	
March	11,414	3,160	1,018	15,592	
April	13,382	2,732	1,079	17,193	
May	10,098	3,170	815	14,083	
June	10,621	3,347	1,146	15,114	
July	13,933	3,563	1,479	18,975	
August	14,048	4,104	1,472	19,624	
September	12,248	4,092	1,689	18,029	
October	14,247	4,099	1,420	19,766	
November	16,763	4,391	1,578	22,732	
December	17,965	4,794	1,840	24,599	
<i>1996</i>					
January	17,693	5,279	821	23,793	59.6
February	16,231	6,050	934	23,215	90.8
March	20,899	5,055	985	26,939	72.8
April	18,153	6,142	935	25,230	46.7
May	14,657	5,394	1,010	21,061	49.5
June	14,421	4,844	1,138	20,403	35.0
July	18,173	5,699	1,258	25,130	32.4
August	18,359	4,553	1,053	23,965	22.1
September	15,592	4,813	1,044	21,449	19.0
October	17,873	5,436	1,157	24,466	23.8
November	24,700	5,293	1,231	31,224	37.4
December	24,590	4,655	1,099	30,344	23.4
<i>1997</i>					
January	24,266	4,328	948	29,542	24.2
February	24,125	5,084	1,171	30,380	30.9
March	23,849	7,532	1,582	32,963	22.4
April	20,607	6,337	1,519	28,463	12.8
May	17,348	6,673	991	25,012	18.8
June	16,012	5,811	1,188	23,011	12.8
July	5,650	2,212	950	8,812	-64.9
August	9,081	2,724	901	12,706	-47.0
September	8,371	3,106	1,216	12,693	-40.8
October	10,482	3,248	1,025	14,755	-39.7
November	12,531	4,141	1,293	17,965	-42.5
December	13,012	4,401	1,409	18,822	-38.0
1997 Total	185,334	55,597	14,193	255,124	-14.2

*Source:* Bulletin of Statistics (various issues).

**Table 7**  
**Prices of Essential Items. Consumer Price Index and Inflation in Five Major Markets.**  
**Phnom Penh. May 1997 - 1998.**

Items	Unit	May (monthly)	July 15-17	Sept. 1-3	Dec. 1-3	February 2-4	May 11-13
CPI (July-September 1994 = 100)		127.6	135.0	134.5	132.0	134.4	144.3
Inflation from previous survey				-0.3	-1.9	1.8	7.4
Inflation (year-on-year)		11.0	16.0	12.2	3.9	9.2	13.0
<i>Current prices in riels</i>							
(1) Rice (#1 quality)	kg	980	1,172	1,172	1,205	1,210	1,420
(2) Pork (without fat)	kg	7,965	7,830	7,440	7,000	7,300	7,430
(3) Beef (# 1 quality)	kg	6,845	8,075	7,975	8,000	7,825	8,475
(4) Mud fish (large)	kg	4,875	5,214	5,773	4,654	4,714	5,214
(5) Chicken egg	egg	207	172	173	162	186	200
(6) Duck egg	egg	262	256	245	224	268	284
(7) Trakuon	kg	830	816	1,161	1,195	870	1,150
(8) Cabbage	kg	1,010	1,185	1,420	1,335	1,860	1,700
(9) Cucumbers	kg	800	810	1,055	1,190	1,025	1,010
(10) Bananas	bunch	975	818	905	805	772	1,194
(11) Brown sugar	kg	1,215	1,242	1,339	1,615	1,175	1,379
(12) MSG (Thai)	0.5 kg	2,865	3,220	2,720	2,785	2,945	3,040
(13) Soy sauce	bottle	1,045	1,270	1,105	1,105	1,100	1,100
(14) Fish sauce	bottle	1,280	1,415	1,325	1,365	1,355	1,350
(15) Sarong (Thai)	piece	6,590	6,603	6,700	7,045	7,015	8,750
(16) Kerosene	litre	935	950	1,040	1,150	1,150	1,150
(17) Charcoal	kg	500	413	480	410	388	440
(18) Gasoline	litre	1,300	1,480	1,429	1,592	1,600	1,700
(19) Motorcycle fare*	passenger	1,360	1,500	1,310	1,261	1,388	1,228
(20) "Lux" bath soap	cake	1,080	1,105	940	850	830	1,005

\* Between Phsar Thmei and Phsar Chbar Ampeou.

*Source:* Data collected by CDRI

**Table 8**  
**Labour Force Projection 1997 - 2002.**

Age Group	Population 1997	Participation rate	Labour force	Population 2002	Labour force unadjusted	Labour force. adjusted	Change in labour force	% change
15-19	1,224,857	0.540	661,425	1,523,458	822,667	810,327	148,904	22.5
20-24	712,005	0.880	626,565	1,223,857	1,076,994	1,052,869	426,305	68.0
25-29	871,110	0.900	783,999	712,005	640,805	624,945	-159,055	-20.3
30-34	706,634	0.899	635,265	871,110	783,128	743,384	108,120	17.0
35-39	637,226	0.910	579,875	706,635	643,038	616,931	37,055	6.4
40-44	459,156	0.906	415,995	637,226	577,327	558,015	142,020	34.1
45-49	404,379	0.891	360,301	459,156	409,108	384,827	24,526	6.9
50-54	327,616	0.874	286,337	404,379	353,427	337,505	51,169	17.9
55-59	292,045	0.812	237,141	327,616	266,024	252,630	15,489	6.5
60-64	220,155	0.699	153,888	292,045	04,140	188,329	34,441	22.4
15 - 64	5,855,183		4,740,788	7,157,487	5,776,657	5,569,763	828,974	17.5

*Remark.* Adjusted labour force year 2002 is adjusted for expected age specific mortality. All calculations based on figures from the 1996 demographic survey reported in and the 1997 Socio-economic Survey.

*Source:* Authors' calculation based on Huguet (1997) and Socio-Economic Survey of Cambodia 1997 (1998: 60. 79).

**Table 9**  
**Disbursement of External Assistance**

Type of assistance	1992	1993	1994	1995	1996	1997
Free-standing technical assistance	39,434	77,995	196,197	172,762	186,973	176,008
Investment-related technical co-operation	8,855	7,305	16,018	34,550	50,652	25,555
Investment project assistance	32,758	67,471	122,510	174,447	159,184	130,614
Budget/balance of payment support	1,410	73,486	69,170	77,887	66,493	2,647
Food aid	39,227	26,034	12,394	4,001	0	632
Emergency & relief assistance	128,499	69,600	31,756	49,673	54,780	39,948
<b>Total disbursement</b>	<b>250,183</b>	<b>321,891</b>	<b>358,045</b>	<b>513,320</b>	<b>518,082</b>	<b>375,404</b>

*Source:* Development Cooperation Report (1998: 8).

*Remarks:* Figures for 1997 are not complete as information from some donors was lacking.