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Working Paper 8

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CAMBODIA DEVELOPMENT RESOURCE INSTITUTE
IN COLLABORATION WITH THE STOCKHOLM SCHOOL OF ECONOMICS AND THE SWEDISH INTERNATIONAL DEVELOPMENT COOPERATION AGENCY

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Abstract

Economic growth in Cambodia came to an abrupt halt in 1997 as the domestic 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 service sectors, while the performance of agriculture has been rather lacklustre. The twin goals of productive employment generation and poverty alleviation will require much more dynamic development of agriculture and of the rural economy as a whole to succeed. Access to productive assets—*i.e.* land, physical and human capital—and insecurity arising from the absence of the rule of law, are identified as the factors with the strongest bearing on poverty.

Glossary

Acronyms

ADB	Asian Development Bank
AIDS	acquired immuno-deficiency syndrome
ASEAN	Association of Southeast Asian Nations
CDR	*Cambodia Development Review*
CIB	Cambodia Investment Board
CPI	consumer price index
EU	European Union
FDI	foreign direct investment
GDP	gross domestic product
GDI	gross domestic investment
GDI	gender-related development index
GSP	generalised system of preferences
HDI	human development index
HIV	human immuno-deficiency virus
IRRI	International Rice Research Institute
MFN	most-favoured nation
MSG	monosodium glutamate
NBC	National Bank of Cambodia
NGO	non-governmental organisation
NIS	National Institute of Statistics
RER	real exchange rate
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
UNRISD	United Nations Research Institute for Social Development
UNTAC	United Nations Transitional Authority in Cambodia

Chapter One

An Overview of Recent Economic Performance

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

The adverse effects of the July events were 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 South Korea. The Asian crisis dramatically changed the external economic environment surrounding Cambodia. The realignment of foreign exchange rates in the crisis countries took place at 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 has 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, both of which had gathered momentum since the coalition government was formed in 1993. Has Cambodia, or to what extent has it, 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 seek to answer.

1. Real Sector Development

1.1. 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 overleaf; Figure 1.1 overleaf). Consequently, per capita GDP declined in 1997 for the first time since Cambodia's transition to a market economy.

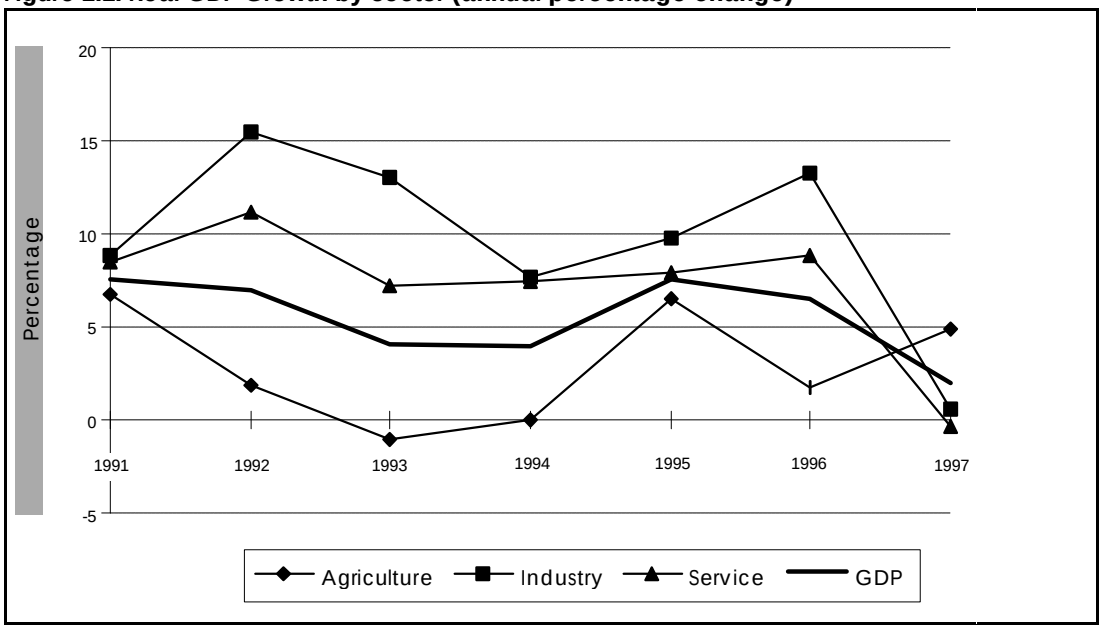
The pattern of economic growth by sector changed notably in 1997. Until 1996, the industrial and service sectors contributed significantly to moderate economic growth. How-

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)[a]	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/dollar)	1267	2689	2545	2451	2624	2989
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 payments						
Growth rate of exports (%)	24.5	7.2	62.8	75.2	-18.5	-4.9
Growth rates of imports (%)	43.1	34.3	56.5	64.6	-8.5	-8.5
Balance of trade ($ million)	-86	-187	-275	-404	-450	-388
Balance of current account ($ million)	-50	-251	-329	-476	-487	-409
Balance of current a/c (% of GDP)	-2.5	-12.5	-13.7	-16.2	-15.5	-13.2
Foreign direct investment ($ million)	33	54	69	151	294	204
Foreign debt						
External debt outstanding ($ million)	1873	1862	1944	2030	2108	2239
Debt-service ratio	4.1	20.5	0.7	3.0	5.2	3.2

a The sum of gross fixed capital formation and increases in stocks (inventories). Source: ADB 1998

Figure 1.1. Real GDP Growth by Sector (annual percentage change)



ever, the growth rate in the industrial 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, tourism and related service sectors (see Chapter Two).[1]

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, 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 from the ministry.

1.2. 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 overleaf). The CIB data should be read with caution, however, as the approved investment projects may not necessarily have been implemented after their registration with the 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 to these sectors, investment projects in the industrial sector, particularly garments, increased substantially in 1997, and even in the first quarter of 1998 (see sectoral issues below for details).

2. Prices and Foreign Exchange Rates

2.1. Prices

Inflation in Phnom Penh was contained around an annual rate of 5 percent in 1994 and 1995. However, it increased to 9 percent in 1996, and this relatively high rate was carried over to 1997, 9.1 percent (Table 1.1 above; Figure 1.2 overleaf). The large fluctuation of inflation rates became apparent particularly in the second half of 1997. Consumer prices in Phnom Penh soared by 6.8 percent per month in July due to the events of 1997 (Figure 1.3). There is evidence that many people in Phnom Penh rushed to markets to buy a large amount of rice and gasoline during and immediately after the July events of 1997 (CDR 1997). Consumers' expectations of supply shortages 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

[1] By mid-1998, the official forecasts for 1998 were as follows: growth rate of real GDP, 3.5 percent; growth rate of CPI, 10.0 percent; central government operations as a percentage of GDP, revenue 8.9 percent, expenditure 13.6 percent, deficit 4.7 percent; balance of current account as a percentage of GDP, -12.6 percent (*Economic and Financial Review*, No. 9–10). The estimates are based on an exchange rate of 3,000 riels per dollar. In the light of the drought affecting agricultural production and the political turmoil after the 1998 election, these forecasts appear somewhat optimistic.

the rapid depreciation of the Cambodian riel against the dollar. The weakening of the riel against the dollar was reflected in the increase in the riel-denominated prices of

Table 1.2. Investment Projects Approved in Cambodia[2]

	1994[a]	1995	1996	1997	1998[b]	Total from 1994–98	Sectoral share (%) 1994–98
			Number of investment projects				
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
			Registered capital ($ million)				
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
			Fixed assets ($ million)				
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
			Manpower (under full production)				
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

a August–December 1994. b Quarter 1 (January–March) 1998. Source: CDRI calculation based on CIB data

imported products. As Figure 1.3 below illustrates, the fluctuation of foreign exchange rates was closely associated with price changes in Cambodia in 1997.

The relevance of standard consumer price index (CPI) as an indicator of the cost of living becomes unclear when the economy is dollarised. This is because CPI is typically measured in the national currency. It is true that the CPI denominated in Cambodian riels reflects the cost of living of people who earn their income in riels. In a dollarised economy, however, a large proportion of economic transactions, including payments of wages and earnings, are actually undertaken in dollars. Thus, the cost of living of people who earn in dollars needs to be measured in 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 dollars and CPI in riels. CPIs in riels and in dollars showed a similar trend until June 1997, then moved in opposite directions after July 1997. The cost of living measured in dollars actually declined after July 1997 as the depreciation of the riel was greater than the increase in prices denominated in riels.

[2] "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 for assets and employment will be met.

Dollarisation may be exacerbating unequal distribution of income in Cambodia. This cost of dollarisation has received little attention in existing literature. There are two groups of

Figure 1.2 Inflation by CPI and Growth of Money Supply (M2) (annual percentage change)

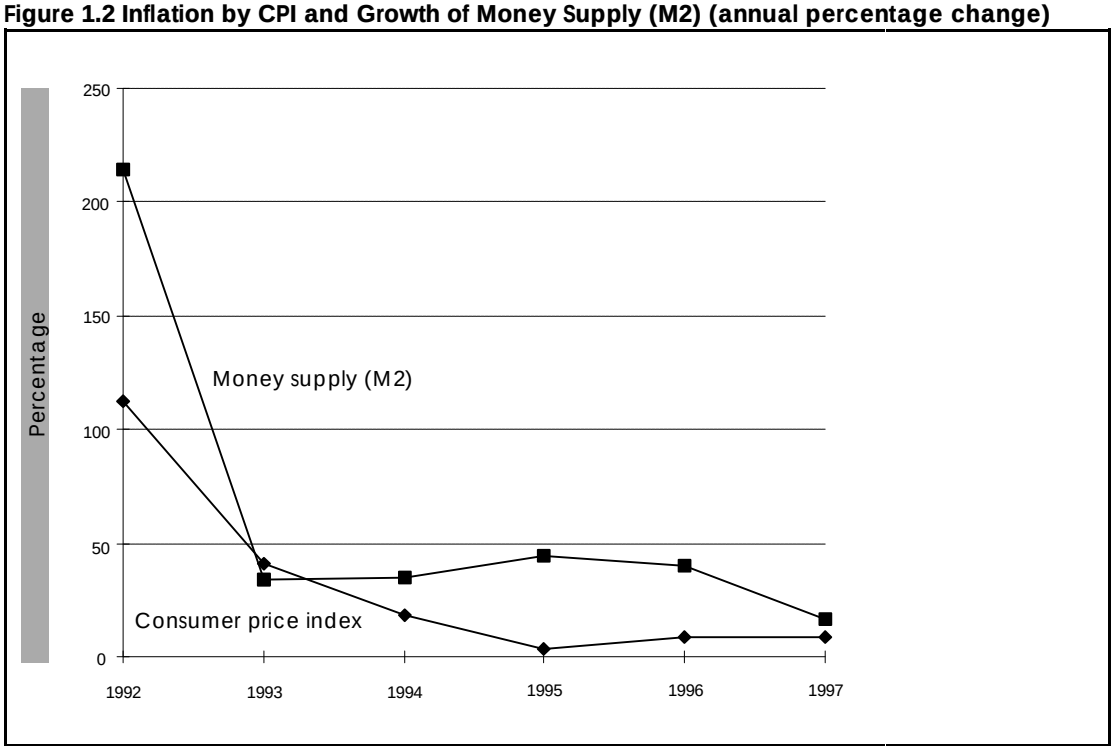
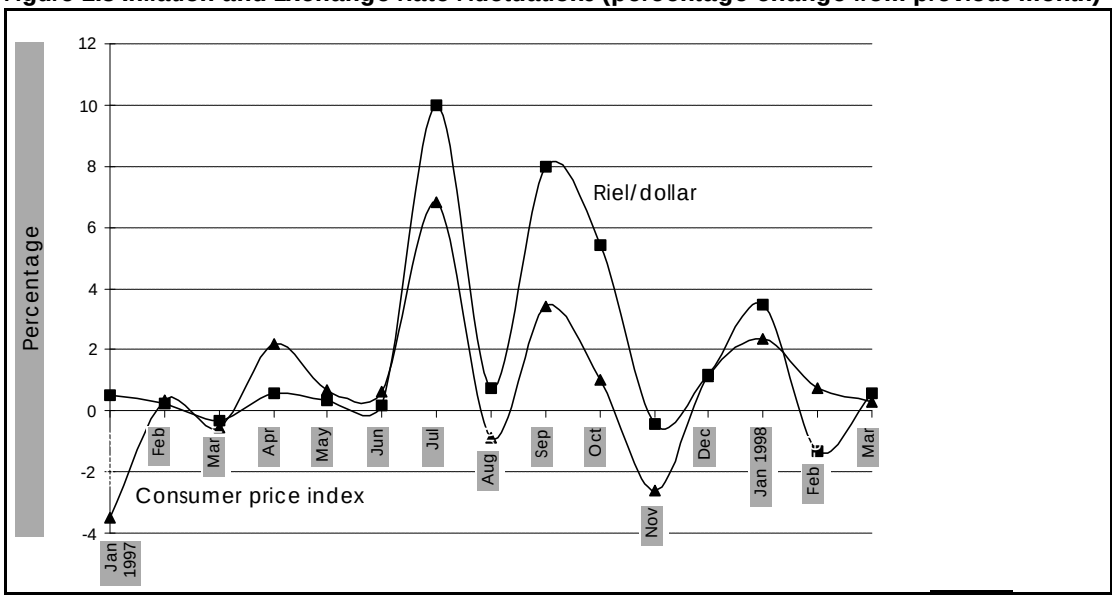


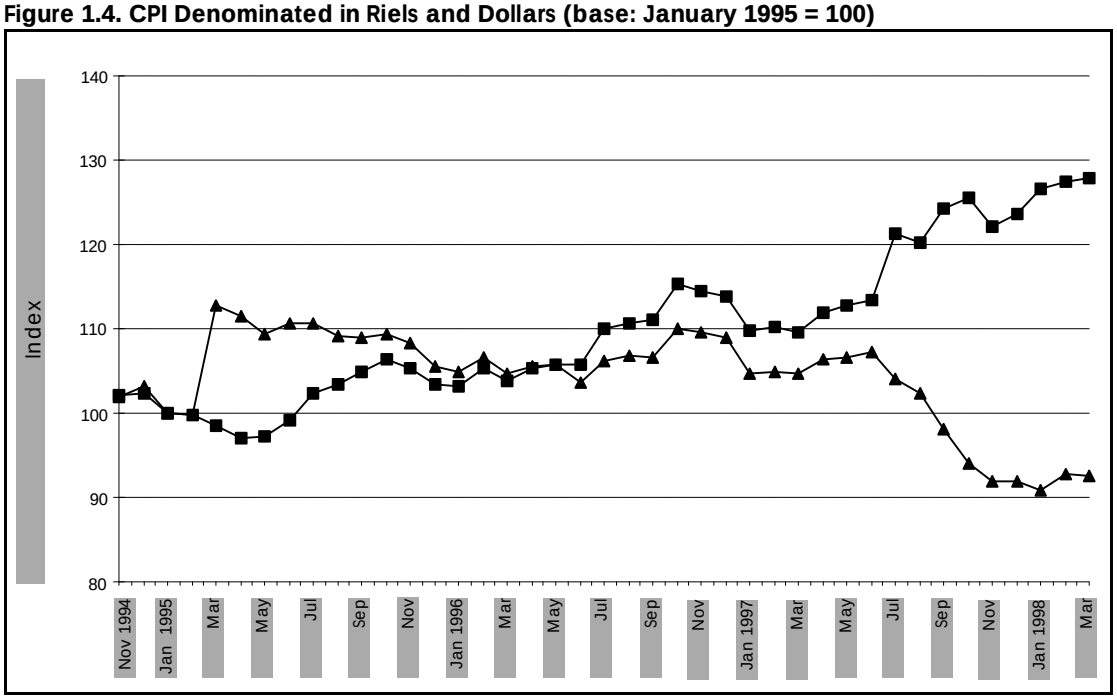
Figure 1.3 Inflation and Exchange Rate Fluctuations (percentage change from previous month)



Cambodian workers: those who earn wages/salaries in dollars and those who earn incomes in riels. The former is likely to belong to the middle- and high-income groups, while 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 dollar will affect these two groups of workers in different ways. That is, it increases the purchasing power of dollar-

denominated wages/salaries, while decreasing that of riel-denominated earnings. As a conse-

Figure 1.4. CPI Denominated in Riels and Dollars (base: January 1995 = 100)



quence, income distribution is likely to become more unequal than that before the depreciation of the riel against the dollar.[3]

2.2. Real Exchange Rates

The recent realignment of foreign exchange rates raises concerns about 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.[4]

Examination of the RER of the Cambodian riel against the Thai baht and the Singapore dollar is instructive. 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 Cambodia's competitiveness against Thailand. By contrast, the RER of Cambodia with Singapore remained at more or less the same level in 1997. Although 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 in 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.

[3] For more detailed analysis of costs and benefits of dollarisation, see Menon 1998.

[4] RER is defined as $E \times Pf/Pd$ where E is the nominal exchange rate (domestic currency units per foreign currency unit), Pf is the price of a foreign basket (of goods) and Pd is the price of a domestic basket.

3. Monetary and Financial Sector Development

3.1. Money Supply

The analysis of money supply in Cambodia requires special caution because large amounts of foreign currencies are widely circulating in the economy. The official record of money supply published by the National Bank of Cambodia (NBC) does not include the amount of dollars, baht and other foreign currencies that circulate outside the banking system. Nevertheless, monitoring available data provide some indication, 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 boom period between 1993 and 1996 (Table 1.1 above). 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 to understand the cause of the decline in 1997. The growth of money supply measured by M1 (currency in circulation and checking accounts) and M2 (M1 plus time and saving deposits, and foreign currency deposits), hit a low of 7 percent in July 1997 after a gradual slowdown since January, then started increasing slowly from August 1997. The slowdown of growth in money supply was caused mainly by the slow growth of foreign currency deposits which made up around 95 percent of commercial bank deposits in Cambodia.

3.2. Financial Sector

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

In contrast with the impact on consumer prices and foreign exchange rates, the internal and external crises had a relatively small impact on the growth of total outstanding credits. Outstanding credits grew by 44 percent in July compared with the level in previous year. In addition, the year-on year growth rates changed little, staying between 40 and 50 percent in the second half of 1997.

Credits to the service sector (construction, wholesale and retail trade, exports, imports, finance, real estate, public utilities and other services) accounted for 78 percent of total commercial bank credits, followed by 18 percent for the manufacturing sector in December 1997. By contrast, credits to the agricultural 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 percent of employed Cambodians were involved in the agricultural sector in 1996. In rural Cambodia, a large number of farmers have no access to credit, or access only to informal credit 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 percent in January to 18 percent in June. The growth rates then stayed at single digit levels from July to September, followed by a moderate recovery from 14 to 21 percent between October and December. The temporary halt of banking operations after the 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 percent in January to only 6 percent in July 1997.

Foreign currency deposits accounted for 95 percent of total deposits with commercial banks in December 1997. This high percentage share of foreign currency deposits changed little throughout 1997. The efforts since late 1995 of the National Bank of Cambodia to de-dollarise the Cambodian economy have not borne fruit.

4. Public Finance

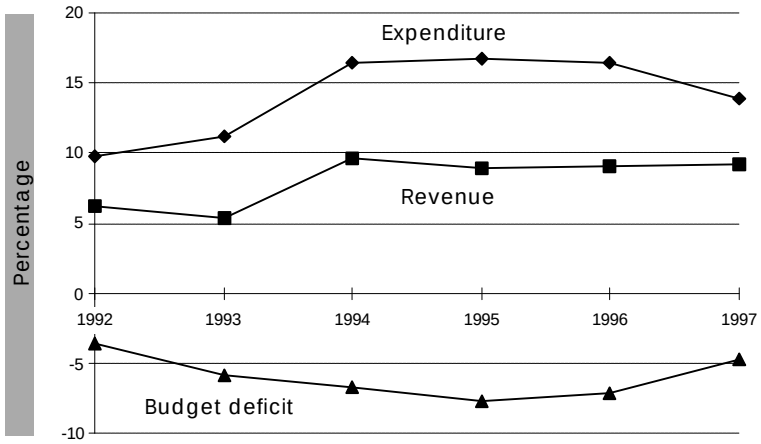
The Cambodian government managed to restore macro-economic stability, with stable rates of inflation and moderate economic growth from 1993 to 1996 (Table 1.3). The government has been, however, dependent on foreign assistance since 1993. From 1994 to 1996, government revenues increased by 26 percent 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 Operations

	1989	1990	1991	1992	1993	1994	1995	1996	1997[a]	1997[b]
						Billions of riels				
Revenue	15.3	23.3	58.9	156	290.1	590.4	640.5	746.4	896.6	881.0
Tax revenue	6.2	13.3	31.1	109.7	234.1	364.6	445.5	534.5	673.5	597.4
o/w 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
Expenditure	21.9	50.2	104.2	245.6	608.4	1019.2	1,200.6	1,280.0	1,480.9	1,319.7
Current expenditure	18.5	43.3	99.0	238.5	373.2	683.7	689.5	797.3	870.1	807.8
Defence	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
Current deficit (accrual)	-3.1	-20.0	-40.1	-82.5	-83.1	-93.3	-49	-50.9	26.5	73.1
Overall Deficit (accrual)	-6.6	-26.9	-45.3	-89.6	-318.3	-428.8	-560.1	-533.6	-584.3	-438.7
Financing	6.6	26.9	45.3	89.6	318.3	428.8	560.1	557.9	673.1	438.1
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	
						Percentage of GDP				
GDP	240.9	598.6	1,336	2,509	5,546	6,150	7,200	8,200	9,250	9,250
Revenue	6.4	3.9	4.4	6.2	5.2	9.6	8.9	9.1	9.7	9.5
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
Expenditure	9.1	8.4	7.8	9.8	11.0	16.6	16.7	15.6	16.0	14.3
Current expenditure	7.7	7.2	7.4	9.5	6.7	11.1	9.6	9.7	9.4	8.7
Defence	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
Current Deficit (accrual)	-1.3	-3.3	-3.0	-3.3	-1.5	-1.5	-0.7	-0.6	0.3	0.8
Overall Deficit (accrual)	-2.7	-4.5	-3.4	-3.6	-5.7	-7.0	-7.8	-6.5	-6.3	-4.7
Financing	2.7	4.5	3.4	3.6	5.7	7.0	7.8	6.8	7.3	4.7
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 bank financing			1.1	4.5	0.6	-0.2	0.1	0.1	0.1	

a 1997 Budget Law. b 1997 actual figures. Source: Ministry of Economy and Finance, Monthly Bulletin of Statistics

Figure 1.5. Public Revenue, Expenditure and Overall Budget Deficit (percentage share in GDP)



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 in customs duties in July. However, customs revenues went back to more or less previous levels from August, as the security situation improved and normal port activities resumed. 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 by the government. Capital expenditures that were largely funded by foreign donors increased again after September when the majority of foreign donors resumed operations. The government introduced austerity measures to reduce public spending, foreseeing a shortage of national revenues, which reduced the level of expenditure in July and August. 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.

Table 1.4. Current Expenditure by Sector (billions of riels)

	1995	1996	1997[a]	1997[b]	% of BL 1997	% of total expenditure 1995	1996	1997
Defence and 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 and rural devel.	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

a 1997 Budget Law (BL). b 1997 actual figures. Source: Ministry of Economy and Finance

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 secu-

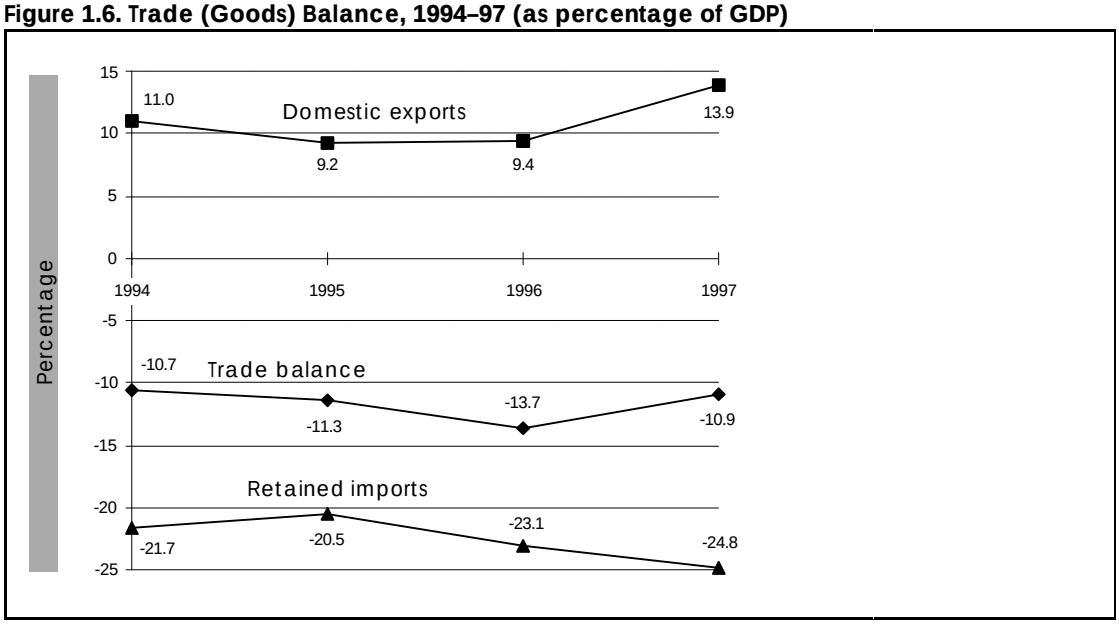
rity overran the 1997 Budget Law level by 4 percent. Expenditure on education, health and agricultural and rural development were most severely affected by austerity measures after the July events, and experienced 10 to 25 percent cuts from the Budget Law levels.

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.

5. External Transactions

Between 1994 and 1996, Cambodia ran a large trade deficit in goods and services (Table 1.5; Figure 1.6). The trade deficit increased by 41 percent from $340 million in 1994 to $480 million in 1996. During the same period, total inflows 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.

Figure 1.6. Trade (Goods) Balance, 1994–97 (as percentage of GDP)



The two crises in 1997 did not affect the 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 United States, 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.[5] 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 in 1996 to $356 million in 1997.

[5] Retained imports refers to total imports less re-exported imports.

Table 1.5. Balance of Payments, 1994–97 (millions of dollars)

	1994	1995	1996	1997	1996				1997			
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Trade balance	-254.6	-331.7	-428.0	-328.1	-115.2	-112.9	-107.7	-92.2	-104.8	-77.5	-60.3	-85.4
Exports (fob)	489.8	855.3	643.6	735.9	157.5	154.5	158.9	172.7	213.0	211.2	152.6	159.1
Domestic exports	262.0	268.0	295.2	417.0	71.1	67.8	77.1	79.2	86.1	108.7	115.3	106.8
Re-exports	227.7	587.2	348.4	318.9	86.4	86.7	81.8	93.4	126.9	102.5	37.3	52.3
Imports (fob)	-744.4	-1187.0	-1071.6	-1064.0	-272.7	-267.4	-266.6	-264.8	-317.8	-288.7	-212.9	-244.5
Retained imports	-516.7	-599.8	-723.2	-745.1	-186.3	-180.7	-184.8	-171.4	-191.0	-186.3	-175.7	-192.2
Service balance	-85.5	-74.1	-52.2	-28.1	-17.4	-13.3	-15.4	-6.1	-5.5	-5.9	-15.4	-1.3
Receipts	54.3	113.8	162.8	160.2	40.6	38.3	39.6	44.2	49.2	45.2	28.6	37.1
Payments	-139.8	-187.9	-215.0	-188.3	-57.9	-51.6	-55.0	-50.4	-54.7	-51.1	-44.0	-38.4
Balance of goods and services	-340.1	-405.8	-480.2	-356.2	-132.6	-126.2	-123.1	-98.3	-110.3	-83.4	-75.7	-86.7
Net income	-46.6	-56.9	-85.7	-42.0	-19.5	-20.8	-23.7	-21.7	-8.5	-10.0	-9.5	-14.0
Receipts	2.3	9.8	12.7	16.0	2.8	3.1	3.3	3.6	3.7	4.0	4.0	4.3
Payments	-48.8	-66.7	-98.4	-58.1	-22.2	-23.9	-27.0	-25.3	-12.2	-14.0	-13.5	-18.3
Private transfers	20.0	20.0	20.0	20.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Balance of current accounts[a]	-366.7	-442.7	-545.9	-378.2	-147.1	-142.1	-141.8	-115.0	-113.8	-88.5	-80.2	-95.7
Official transfers	283.1	335.0	436.7	233.4	129.1	109.1	100.6	97.9	72.9	57.3	54.0	49.2
Receipts	283.3	335.9	439.1	233.8	129.2	109.1	101.2	99.5	72.9	57.4	54.0	49.5
Payments	-0.2	-0.9	-2.4	-0.4	-0.2	0.0	-0.5	-1.7	0.0	-0.1	0.0	-0.2
Balance of current accounts[b]	-83.6	-107.7	-109.2	-144.8	-18.0	-33.0	-41.1	-17.1	-41.0	-31.1	-26.2	-46.5
Official sector loans (excl. IMF; net)	51.6	60.6	82.7	42.3	27.3	20.8	17.9	16.7	9.6	6.3	12.3	14.1
Drawings	60.6	72.4	89.3	44.3	28.0	20.9	21.8	18.6	9.8	6.4	12.3	15.8
Repayments	-9.0	-11.8	-6.6	-2.0	-0.7	-0.2	-3.9	-1.9	-0.2	-0.2	0.0	-1.7
Non-official sector investment	2.9	49.3	169.5	178.7	22.4	68.1	28.8	50.2	27.2	77.8	70.3	3.4
Direct investment	69.0	150.7	293.7	203.7	68.8	99.8	58.0	67.2	53.6	54.6	47.0	48.5
Portfolio invest.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other investment	-66.1	-101.5	-124.2	-25.1	-46.4	-31.7	-29.1	-17.0	-26.4	23.2	23.3	-45.1
Net errors and omissions	65.0	11.4	-70.9	-42.9	-18.5	-35.0	1.5	-19.0	13.3	-45.6	-52.9	42.3
Overall balance	35.9	13.7	72.0	33.2	13.3	20.9	7.1	30.8	9.1	7.4	3.4	13.3
Financing	-35.9	-13.7	-72.0	-33.9	-13.3	-20.9	-7.1	-30.8	-9.1	-7.4	-3.4	-14.0
NBC foreign assets	-50.9	-30.9	-68.9	-34.3	-14.6	-5.9	-14.3	-34.1	-8.9	-7.4	-3.4	-14.6
Excep. financing	15.0	17.2	-3.2	0.4	1.4	-15.0	7.2	3.3	-0.2	0.0	0.0	0.6
Memorandum item												
Current a/c (excl. off. trans.)/GDP (%)	-15.4	-15.1	-17.4	-12.6								
Current a/c (incl. off. trans.)/GDP (%)	-3.5	-3.7	-3.5	-4.8								
Nominal GDP ($ million)	2,385	2,923	3,132	3,008								

a Excluding official transfers. b Including official transfers. Source: National Bank of Cambodia

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.[6] 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 in 1996 to just $33 million in 1997.

Figure 1.7. Foreign Exchange Rates of the Riel, May 1997 – May 1998 (base: 7 May 1997 = 100)

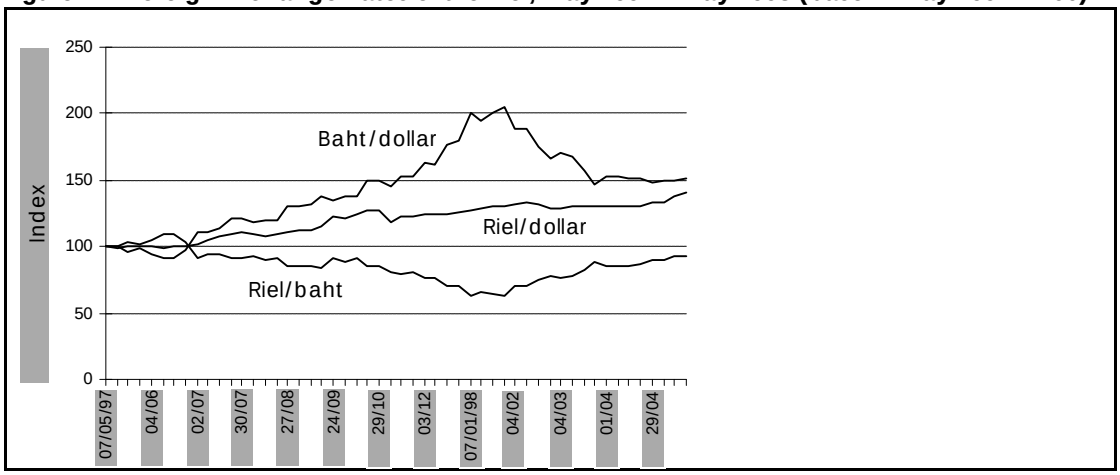


Table 1.6. Foreign Investment Projects Approved, 1995–98[7]

	Investment projects (number)				Registered capital ($ million)				Fixed assets ($ million)			
	1995	1996	1997	1998[a]	1995	1996	1997	1998[a]	1995	1996	1997	1998[a]
ASEAN	60	60	47	11	1,429	104	76	17	1,566	286	111	35
Indonesia	1	6	4	2	2	3	2	1	1	13	1	2
Malaysia	21	25	16	3	1,361	54	53	8	1,421	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
Other Asia-Pacific	61	107	150	36	37	172	193	75	38	251	364	93
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
South 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
North America	12	7	16	1	46	14	16	0	149	8	97	0
Europe	23	17	20	6	71	67	13	6	213	69	21	7
Middle East	0	0	1	0	0	0	1	0	0	0	0	0

a Quarter 1 (January–March). Source: CDRI calculations based on CIB data

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

6 For more details see Grube (1998b).

7 "Registered capital" and "fixed assets" refer to intentions given in the request for project approval. Not all approved projects may have been implemented, nor may all intentions with regard to capital and assets have been realised.

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.

6. Labour Markets

According to the *Socio-Economic Survey of 1993/94*, 75 percent of Cambodia's employed persons were involved in the agricultural sector, 5 percent in the industrial sector and 20 percent in the service sector (Table 1.7). In particular, 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.

Table 1.7. Labour Productivity, 1993–94 and 1996

	Employment (number)				Real GDP[a] (billions of riels)		Real GDP / emp. (riels / emp.)		Productivity index[b]	
	1993/94	%	1996	%	1993/94	1996	1993/94	1996	1993/94	1996
All industry groups	3,939,845	100.0	4,858,769	100.0	298	348	75,612	71,602	100	95
Agricultural sector	2,956,746	75.0	3,797,283	78.2	137	149	46,369	39,107	100	84
Agriculture, forestry	2,903,031	73.7	3,695,119	76.1	125	136	43,127	36,914	100	86
Fishing	53,715	1.4	102,164	2.1	12	12	221,540	118,437	100	53
Industrial sector	175,991	4.5	230,143	4.7	54	69	304,845	300,683	100	99
Mining, quarrying	6,778	0.2	1,109	0.0	4	5	523,753	4,147,881	100	792
Manufacturing	135,090	3.4	184,009	3.8	21	28	157,673	149,449	100	95
Electricity, gas, water	3,306	0.1	3,557	0.1	1	1	211,736	253,022	100	119
Construction	30,817	0.8	41,468	0.9	28	36	911,834	872,962	100	96
Service sector	807,110	20.5	821,683	16.9	107	130	132,758	158,455	100	119
Trade	385,696	9.8	429,954	8.8	44	55	112,913	126,990	100	112
Hotels, restaurants	7,279	0.2	7,606	0.2	9	2	1,277,648	289,245	100	23
Transport, communication	121,389	3.1	71,229	1.5	2	12	12,769	171,279	100	1,341
Real estate, rentals	12,070	0.3	1,203	0.0	20	23	1,619,718	19,911,869	100	1,180
Public admin, defence	148,512	3.8	156,223	3.2	12	13	80,802	81,294	100	101
Other services	132,164	3.4	155,468	3.2	21	26	160,785	164,021	100	102

a GDP at 1989 constant prices; average of figures in 1993 and 1994. b 1993–94 = 100. Source: RGC 1995, NIS 1995, 1997, World Bank 1997

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* , 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 Four, 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 disproportionate 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 reductions in poverty.

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 (NIS), 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 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
Monthly wages at current prices (Base: 1997 Q2 = 100)			
Private sector	100	104	93
Government services	100	102	100
Extra-territorial organisations	100	64	69
Total	100	101	97
Monthly wages at constant prices[a] (Base: 1997 Q2 = 100)			
Private sector	100	94	82
Government services	100	92	88
Extra-territorial organisations	100	58	60
Total	100	91	85
Wage employment			
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
Percentage of total employment			
Private sector	51.2	43.7	44.5
Government services	47.0	54.0	54.2
Extra-territorial organisations	1.8	2.3	1.3
Total	100.0	100.0	100.0
Wage employment (Base: 1997 Q2 = 100)			
Private sector	100	103	107
Government services	100	105	108
Extra-territorial organisations	100	64	38
Total	100	102	105

a Constant prices at July-September 1994. Source: NIS

7. Sectoral Issues

7.1. 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 in 1996, about the same amount as the sum of the rubber and log exports that year (Godfrey 1997). The development of the tourism sector also has significant economic impacts on other sectors in Cambodia. It boosts domestic demand for construction, transportation, petrol 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. 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. On average, and supposing that each tourist stayed for five days and spend $30 for basic needs and $40 for accommodation per day, the domestic consumer markets could have earned about $9 million and hotels another $12 million. If each tourist had also spent $200 on gifts, more than $12 million could have been spent in domestic markets. In all, Cambodia could have earned an additional $33 million 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.

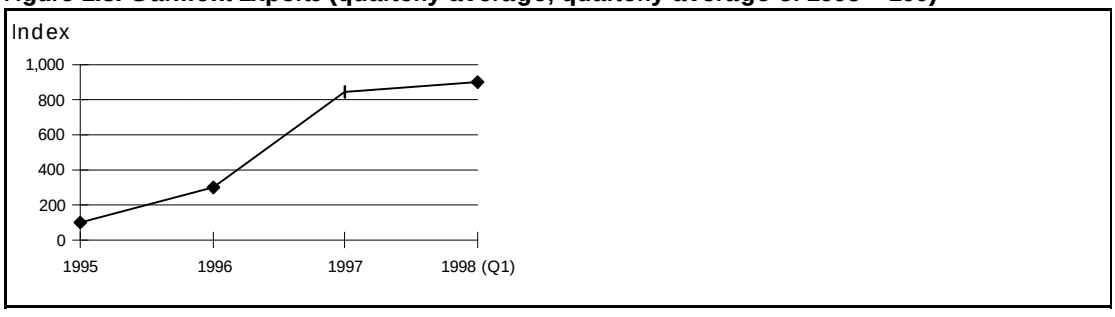
Interviews with the Ministry of Tourism and the Hotel Association in December 1997 revealed that of 120 hotels in Phnom Penh as of August 1997, 17 small hotels had closed down after the events of July 1997. The interviews also indicate that hotels have been coping with the continuing weak demand by reducing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

7.2. Garments

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

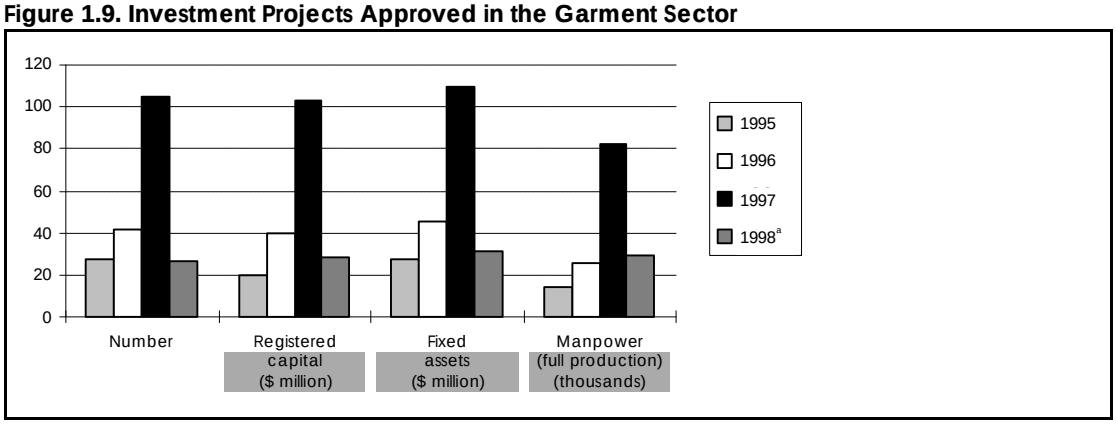
The expansion was significant in both export and investment. The value of garment exports tripled from 1995 to 1996, and further tripled from 1996 to 1997 (Figure 1.8). The investment projects registered at the CIB increased from 27 in 1995 to 42 in 1996 and 105 in 1997 (Figure 1.9).

Figure 1.8. Garment Exports (quarterly average; quarterly average of 1995 = 100)



Although the garment sector created a 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

Figure 1.9. Investment Projects Approved in the Garment Sector



a Figures for 1998 for first quarter only (January–March)

complaints by factory workers that they had been working overtime 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.

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.

8.1. 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[8]

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

Source: Agricultural Statistics (various issues)

[8] Figures based on "harvest years," e.g. June–May.

Table 1.10. Yields of Major Crops by Country in the Region, 1994/95 (tons per hectare)

	Cambodia	Laos	Myanmar	Vietnam	Thailand	Malaysia	Philippines	Indonesia
Rice	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
Soybeans	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	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)

8.2. Rice

Although rice cultivation dominates agricultural activities, it is still based on traditional methods and is dependent on rainfall. Slightly more than 2.0 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.[9] This yield is, however, still the lowest in the region, and compares unfavourably with the 2.0 to 3.0 tons per hectare obtained in other countries. The fluctuation of rice yields is largely due to fluctuations 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 year could have been harvested in the last few years, if there had been no damage (Table 1.12).

Table 1.11. Damaged Areas: Cultivated Areas Minus Harvested Areas (hectares)[a]

	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 beans	190	(0.9)	1,000	(3.7)	430	(1.7)	1,287	(4.6)	850	(3.2)
Soybeans	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)

a Figures in parentheses show percentage of cultivated areas. Source: Agricultural Statistics (various issues)

Table 1.12. Crop Production Losses (tons)[a]

	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 beans	99	(0.9)	654	(3.8)	334	(1.7)	662	(4.8)	490	(3.3)
Soybeans	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)

a Figures in parentheses show percentage of production. Source: Agricultural Statistics (various issues)

[9] Yields are calculated as production per unit of cultivated area.

Only 16 percent of paddy land is irrigated; the rest is rain-fed. 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.[10] 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 five to seven months to be harvested and is highly prone to floods and droughts. The average yield has been 1.7 tons per hectare or less in the past five years. After harvest, this land is made available to animals until the next rainy season, though a small proportion is used for growing other crops such as watermelons, 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, are flooded annually by the rise of the Mekong River 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 flood-recession rice has been as high as 3.0 tons per hectare in the past four years.

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.

8.3. Other crops

Beside the staple rice, considerable amounts of corn, vegetables, mung beans, soybeans, 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 is still at the household scale, though it is the primary source of income for many households.

As can be seen in Table 1.10 above, non-rice crops cover 10 percent of about 2.0 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 each of soybeans, mung beans and yellow corn were exported annually from 1986 to 1990. Of interest to note is that the yield of soybeans in Cambodia is the highest among the countries in the region (see Table 1.10). It seems that Cambodia has a comparative advantage in soybean production, which offers 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

[10] A CDRI cross-country study shows that Cambodia's fresh water resources per capita in 1995 were among the largest in the region.

enterprises in Cambodia. At present, Cambodia is a large net importer of processed grain from the region.

8.4. 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 fruit that can be grown locally from the latter countries. This may reflect the neglect of this sub-sector, which needs to be developed with 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.

8.5. Livestock and Poultry

Animal husbandry is still at a small scale, though 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 some poultry for production 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
			Thousands of heads		
Cows and oxen	2,527	2,622	2,778	2,762	2,872
Buffalo	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
			Percentage change from previous year		
Cows and oxen	-	3.8	5.9	-0.6	4.0
Buffalo	-	-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 buffalo 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 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, though 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 limited access to veterinary and extension services, households normally suffer from death of their livestock and poultry resulting from disease. Poor households that 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 household-scale animal raising inefficient and to have 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 Impact of the Internal and External Crises

The events of July 1997 were precipitated by conflicts between the 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 impact of the twin crises on Cambodia. The field studies included five market surveys from July 1997 to May 1998, and interviews with enterprises conducted in February and May 1998.

1. The Impact on Consumer Prices and Spending

CDRI undertook five market surveys between July 1997 and May 1998. Vendors in five major markets in Phnom Penh—Olympic, Thmei, Tuol Tumpong (Russian), O'Russei and Chbar Ampeu—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, and 20 price samples were taken for each item. Market vendors were interviewed about the volume of their sales and the amount of their earnings in order to assess domestic consumer 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.

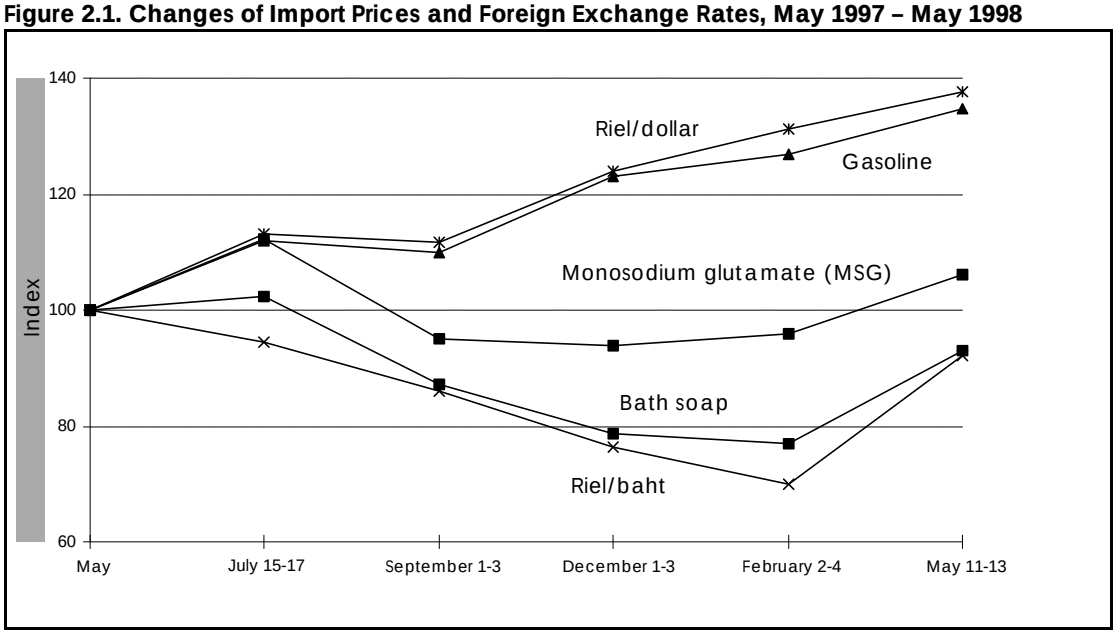
The small sample size (around 130 vendors) and limited geographical coverage mean that the results cannot be extrapolated to the national level. However, with no similar surveys currently available in Cambodia, these provide the primary source of information about consumer prices and demand and related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

1.1. Price Changes

Consumer prices of 20 essential items increased sharply after the events of 5 and 6 July 1997, according to the first market survey undertaken on 15–17 July 1997. The second survey on 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 comprise a large proportion of the 20 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.

By contrast, the prices of imported products fluctuated more than those of domestic products after 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 20 items in the

Figure 2.1. Changes of Import Prices and Foreign Exchange Rates, May 1997 – May 1998



Base: May 1997 = 100

surveys, monosodium glutamate (MSG), sarongs and soap are imported from Thailand and are priced in baht in Phnom Penh markets. The prices of MSG and soap in Cambodian riels declined from July 1997 to February 1998, then went up again in May 1998. As Figure 2.1 illustrates, the decline of the prices of these imported items was closely related to the appreciation and subsequent depreciation of the riel against the baht between July 1997 and May 1998. The other imported items, gasoline and kerosene, are usually priced in dollars. The prices of these products were again closely associated with the fluctuation of the riel against the dollar (Figure 2.1).

The most recent survey in May found a considerable increase in the prices of the 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.

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 to the same month the previous year. Vendors confirmed that the quantity supplied this year was lower than last year.

1.2. Soaring Rice Prices

The May survey in 1998 found the price of rice soaring, as had also been reported in the local 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, because 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, though 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.

1.3. Consumer Spending

Consumer spending declined sharply after the July events in 1997. The second market survey undertaken in September 1997 revealed that, among the 130 vendors interviewed, 95 percent reported that their sales were lower 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 impact of the July events was particularly severe for those vendors selling items such as non-food and durable goods (Table 2.1). Although there were some indications of recovery, notably in

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

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?

Types 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[a]	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[b]	100	100	100	100	24	30	36	45	0	30	29	47
Household and utility items[c]	100	94	82	100	40	43	54	44	21	53	75	60
Clothing, shoes and bags	100	95	100	100	32	40	46	42	0	43	57	37
Non-durable items	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

a 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). b Luxury items include precious stones, gems, gold, jewellery, televisions, cassette players, watches, video tapes, gifts, etc. c Household and utility items include kitchenware, plastic containers, blankets, mosquito nets, construction materials, electrical appliances, motorcycle spare parts, etc.

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 became very small in the face of the 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.

1.4. Transactions with Provincial Traders

Little information is available regarding consumer spending in provincial markets in Cambodia. CDRI interviews with vendors in Phnom Penh, however, revealed some indications regarding the impact of the crises on provincial markets. 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 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.

1.5. 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 by 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 motorcycle 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 to $1,200, 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 evidence 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. 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.

2.1. 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 in 1996 to $224 million 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.

2.2. 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 per cubic metre before July 1997 to only $150 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.

2.3. 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 per ton in February 1997 from $105 per ton a year earlier. The company was forced to reduce the price of its domestic cement from $90 to $65 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 per ton in May, allowing an increase in the price of domestic cement to $70.

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.

2.4. 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 per case early in 1998, compared with $17 a year earlier. 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.

2.5. 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 dollar. After February, however, locally produced soft drinks gradually increased their market share again because the baht bounced back and inflation picked up in Thailand.

2.6. 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 dollar terms in February 1998. They explained that this was because of emergency policy measures by the Thai government to restrict the export of white sugar, considered an essential food item. In addition, the company had to cut their wholesale prices to maintain their market share. Notwithstanding 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 its 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.

2.7. 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 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 operations as the company faced competition from imported plastic products.

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 had 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.[1] 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.

[1] Net daily earnings are gross earnings minus business expenses (such as the hire of equipment and the purchase of inputs).

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

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		
	Jul. 1997	Jan. 1998	May 1998	Jan. 98 / Jul. 97	May 98 / Jan. 98	May 98 / Jul. 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

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

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 troublemakers 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.

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 impact of the July events on Cambodia's economy was apparent and substantial. It caused the depreciation of the Cambodian riel against the dollar, a sharp reduction of consumer spending, the decline of investment expenditures (both domestic and foreign), and the contraction of the tourism sector. Government expenditures were also adversely affected by a temporary suspension of foreign assistance to Cambodia. The July events were 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 primarily through 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: 1) from July 1997 to January 1998, and 2) from February 1998.

4.1. Phase One (July 1997 – January 1998)

The immediate, and apparent, impact of the crisis on Cambodia was the appreciation of Cambodia's foreign exchange rates (riels and dollars) *vis-à-vis* the currencies of the crisis countries. This trend continued until the weakening of regional currencies hit 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 riel and the dollar than their pre-July 1997 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 events of the previous year;
- Despite the erosion of the competitiveness in Cambodia, the trade balance actually improved in the second half 1997. This was due mainly to the expansion of garment exports oriented to European and US markets which have been nearly unaffected by the Asian crisis.
- Foreign direct investment (FDI) 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 United States may explain the favourable development in the garment sector.
- The labour market in Cambodia also experienced declines in monthly real wages and wage employment after July 1997 compared with pre-July levels. The July events of 1997 caused a 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 percent during this period.

4.2. Phase 2 (February 1998 – May 1998)

The realignment of foreign exchange rates entered into a new phase in January when the regional currencies started appreciating gradually. Inflationary pressures also became apparent in some of the crisis countries. These factors eroded the competitiveness gain of the crisis countries in phase one. 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 the Cambodian riel had bounced back to more or less their levels of a year earlier. 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 South Korea, dropped sharply in the first quarter of 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. Vulnerable workers' livelihoods have been also pressured by recent inflation, particularly of rice.

Chapter Three

The Poverty Profile

1. Background

Two unique features of Cambodian history have a bearing on its economic and human development situation. First, Cambodia has experienced, during the Khmer Rouge years of 1975–79, not merely genocide on a scale comparable to that of Stalin's tyrannical rule in the Soviet Union in 1930s, 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 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 past three decades, the country has been involved in armed conflicts, the result being large displacements of the population for security reasons (about 100,000 internally displaced people), a large proportion of the population being disabled because of armed conflict and land mines (30 disabled per 1,000 persons), and a large number of female-headed households (25.3 percent of all Cambodian households).

The turbulent past has had a profound influence on Cambodia's development (UNDP 1997:7). Cambodia is now considered to be one of the poorest countries in the world, with a per capita income of $260. Since 1993, the government has taken important steps in re-establishing political and economic stability. One of the main priorities in the development strategies laid down in Cambodia's First Socio-Economic Development Plan of 1996–2000 is poverty reduction. Four basic surveys have been undertaken during the past five years to collect systematic information about the poor and to assist the government in designing effective policies to tackle the problem of poverty. Furthermore, the first comprehensive population census since 1962 was undertaken in 1998. The *Socio-Economic Survey, 1993/94*, carried out by the National Institute of Statistics (NIS) within the Ministry of Planning and sponsored by the Asian Development Bank (ADB) and the United Nations Development Programme (UNDP), was the first large-scale household survey of living standards in Cambodia, though complete coverage of the country was not feasible for security reasons. On the basis of this study, a nationwide poverty profile of the country for the years 1993–94 was elaborated (Prescott & Pradhan 1997) which provided policy-oriented comparisons aimed at permitting better targeting of anti-poverty-programmes and which served as a baseline for monitoring and assessment of future developments towards poverty alleviation. This survey was followed up by two more socio-economic surveys undertaken in 1996 and 1997. On the basis of these surveys, the poverty profile was updated in 1998 (see the *Poverty Profile*

1997). In addition, a demographic survey, serving the purpose of a precursor to the subsequent population census, was undertaken in 1996.[1]

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 analyse the distribution of living standards in Cambodia. Because there are no reliable data on income distribution for different strata of the population, we will analyse the distribution of the per capita consumption by quintiles and by different population groups (Table 3.1 and 3.2).

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

	Consumption per day, 1997			Consumption per day, 1993–94		
	Nominal (riels)	Real (riels)[a]	Food share[b]	Nominal (riels)	Real (riels)[a]	Food share[b]
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 (richest)	5,435	5,852	0.62	4,281	4,962	0.57
By area						
Phnom Penh	4,453	4,693	0.56	4,267	4,367	0.56
Other urban areas	2,859	3,076	0.68	2,412	2,873	0.67
Rural areas	1,735	2,187	0.72	1,403	1,887	0.69
All Cambodia[c]	2,223	2,530	0.69	1,832	2,262	0.68

a Real consumption data are expressed in 1993-94 Phnom Penh prices using Laspeyer's price deflated. b Food share is food consumption as a proportion of total consumption. c All Cambodia excludes areas which could not be surveyed for security reasons. Source: Prescott & Pradhan 1997, NIS 1998.

Table 3.2. Inequality Measures by Area, 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	0.420	0.359	2.5	3.5	31.2	30.3
Other urban areas	0.460	0.414	2.7	3.2	36.7	35.3
Rural areas	0.290	0.255	4.4	4.7	22.9	23.1
All Cambodia	0.370	0.366	3.4	3.7	32.8	32.2

Figures refer only to sampled areas

Source: Prescott & Pradhan 1997, NIS 1998.

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 per year. For 1997, per capita consumption on average was 1,543 riels per day (about $260 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 percent and 64 percent of all consumption expenditures in 1993/94 and 1997 respectively were devoted to food consumption. Rural households in 1997 spent as much as 71 percent of total monthly consumption expenditure on food (NIS 1998). According to the 1997 *Socio-Economic Survey*, the average level of per capita consumption in Cambodia is 2,261 calories per day.

[1] For summary results of the survey, see *Demographic Survey 1996*.

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 in 1993/94 was more than twice as high in Phnom Penh as in the country as a whole, and 50 percent higher than 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 centres—Phnom Penh and Sihanoukville—are clearly better off than the rest of the country. The provinces in the coastal area—Sihanoukville and Kampot—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 percent 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.

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 percent of the population accounts for more than 30 percent of total consumption expenditure in urban areas, while the poorest 10 percent consume around 3 percent (see Table 3.2)

The Gini coefficient[2] is used to measure the degree of concentration of income or expenditure or as a measure of inequality in this characteristic. 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 neighbouring countries are 0.32 in Laos, 0.34 in Vietnam and 0.32 in Indonesia (Prescott & Pradhan 1997:15).

3. Measurements of Poverty

According to 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 anti-poverty programmes and monitor development progress. Unlike most of its neighbouring 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 (Prescott & Pradhan 1997). Per capita consumption was calculated at the individual level, assuming that each household member receives an equal share of the household's 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

[2] 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.

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 1993–94. 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 dollar 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, 1993–94 and 1997 (riels per day)

	July-September 1993–94	July 1997
1. Food poverty line		
Phnom Penh	1,185	1,378
Other urban areas	995	1,102
Rural areas	881	940
2. Non-food allowance		
Phnom Penh	393	441
Other urban areas	269	305
Rural areas	236	270
Poverty line (1 + 2)		
Phnom Penh	1,578	1,819
Other urban areas	1,264	1,407
Rural areas	1,117	1,210

Source: Poverty Profile 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 (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 indices 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 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 re-

distributed 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 an 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 standards 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 indices (head-count index, poverty gap index, severity of poverty, which were used to make poverty comparisons. (Table 3.4).

Table 3.4. Poverty Structure by Area, 1993–94 and 1997

	Percent of total pop.	Head-count index		Poverty gap		Severity index	
		Index (%)	Contrib to total (%)[a]	Index (%)	Contrib to total (%)[a]	Index (%)	Contrib to total (%)[a]
1997							
Food poverty line							
Phnom Penh	9.9	3.4	1.9	0.5	1.4	0.1	1.1
Other urban areas	10.7	15.4	9.2	3.3	10.1	1.1	10.4
Rural areas	79.4	20.0	88.9	3.9	88.5	1.2	88.5
Total	100.0	17.9	100.0	3.5	100.0	1.1	100.0
Poverty line							
Phnom Penh	9.9	11.1	3.1	2.2	2.5	0.6	1.9
Other urban areas	0.7	29.9	8.9	7.5	9.2	2.7	9.5
Rural areas	79.4	40.1	88.1	9.7	88.3	3.4	88.6
Total	100.0	36.1	100.0	8.7	100.0	3.1	100.0
1993–94							
Food poverty line							
Phnom Penh	10.7	6.2	3.3	1.3	3.7	0.4	4.0
Other urban areas	11.0	19.6	10.8	4.4	13.1	1.4	14.8
Rural areas	78.2	21.9	85.9	4.0	83.2	1.1	81.2
Total	100.0	20.0	100.0	3.7	100.0	1.1	100.0
Poverty line							
Phnom Penh	10.7	11.4	3.1	3.1	3.6	1.2	4.1
Other urban areas	11.0	36.6	10.4	9.6	11.6	3.6	12.6
Rural areas	78.2	43.1	86.5	10.0	84.9	3.3	83.3
Total	100.0	39.0	100.0	9.2	100.0	3.1	100.0

a Contribution to total (%) = each area's frequency (N) multiplied by the ratio of the area's index to the total index for the whole country.

Source: NIS 1995, NIS 1998, Prescott & Pradhan 1997

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 percent), which is almost four times higher than 11.1 percent incidence of poverty in Phnom Penh, and significantly higher than in other urban areas (29.9 percent). With regard to the magnitude of regional contributions to national poverty, it is obvious that at least 88 percent of all the poor are concentrated in rural areas.

For Cambodia as a whole, 36 percent of the population were found to be below the poverty line, with 20 percent of the 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 highest in rural areas and lowest in Phnom Penh. The sample-weighted aggregate incidence of food poverty becomes 18 percent. This is still an high figure, which suggests that around one-fifth of the Cambodian population is food-insufficient and cannot meet its daily calorie requirement, even if its consumption expenditures included nothing but food.

The majority of the population in Cambodia is distributed around the poverty line. According to an analysis of the sensitivity of the poverty measures to changes in the poverty line, even small changes in the poverty line in rural areas would yield relatively large changes in the head-count index—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 (Prescott & Pradhan 1997:23–24).

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

The United Nations' 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 the adult literacy rate and school enrolment ratios; and standards 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 (HDI) 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 lift the country up to the 140th spot, just below of that of India and Pakistan (UNDP 1997:16–17). 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 *Human Development Report* of 1997, is not available for Cambodia.

Cambodia has one of the lowest rates of utilisation of health services in the world. The infant mortality rate is still very high. Over 90 new-born children per 1,000 die within their first year, earning Cambodia the unenviable position as the country with the highest infant mortality in East and 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 near future could be staggering. It has been estimated that 120.000 people are infected with HIV, and a projection made to the year 2006 indicates that almost one million could be expected to be infected (UNDP 1997:51–52).

4. Who Are the Poor in Cambodia?

Some aspects of the pattern of poverty have been discussed above. Most notable is 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 also live in poverty, and that there is a 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 of 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 to 4.1 in the richest quintile (see Table 4.1). This can largely be explained by the higher dependency ratio in the larger households. In other words, in large households each income earner has to support more people than in small households. The links between the demographic structure and poverty are 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 (Rao & Zaan 1997:3–4). Female-headed households have in the past been highlighted as being particularly vulnerable to depravation 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 Head of Household, 1997

	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

A third of the female-headed households were found to be below the poverty line in 1997, compared to 37 percent 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 a woman. 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 men. The average size of a female-headed household is 4.3, as against 5.5 for households headed by men, and 47 percent of the former but only 26 percent of the latter have no more than three members (Rao & Zaan 1997:7; NIS 1998:35). 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 percent, 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 percent 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 percent) than in the households headed by men (92 percent) (Rao & Zaan 1997:6). This difference no doubt goes a long way to explain the differences in the incidence of poverty.

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).[3]

[3] See also the *Poverty Profile 1997* (pages 23–24)

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

	Freq. (%)	Head-count index Index (%)	Poverty gap Index (%)	Severity index Index (%)
Literacy				
Illiterate	31.6	41.7	10.3	3.7
Literate	68.1	33.5	8.0	2.8
Level of education[a]				
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

a Primary, lower secondary and higher secondary include those who began but did not complete the respective level Source: Poverty Profile 1997.

However, this should not be taken as an indication that education is unrelated to poverty. Apart from the somewhat superficial nature of the analysis,[4] 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 are 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 (UNDP 1997:60–62).

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 a large part of the country was excluded from the sample frames of the *Socio-Economic Survey* in both 1993–94 and 1997. Nevertheless, it is possible to compare the Cambodian estimates with corresponding estimates from other regional countries for which poverty estimates were calculated using comparable methodology for setting poverty lines. Comparable poverty estimates for Vietnam, Laos and Indonesia are summarised in Table 3.7. These suggest that the incidence of rural poverty in Cambodia (43 percent) is lower than in some of its neigh-

Table 3.7. Poverty in a Regional Perspective

	Head-count index (%)			Poverty gap (%)		
	Urban	Rural	All areas	Urban	Rural	All areas
1. Food poverty line						
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
2. Poverty line						
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 & Pradhan 1997.

[4] Apparently the analysis was based on a simple cross-tabulation of two variables without taking into account any other factors, such as age, household size, etc.

bouring countries, notably Vietnam (47 percent) and Laos (53 percent), but remains considerably higher than in Indonesia (24 percent).[5] 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 percent, urban poverty in Cambodia appears to be marginally higher than in the rest of what used to be Indochina (Vietnam 20 percent and Laos 24 percent) and much higher than in Indonesia (10 percent).

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

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 *(Poverty Profile* 1997).

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 percent 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 percent), modestly in rural areas (from 43 to 40 percent), but not at all in Phnom Penh, where it remains at the level of 11 percent).

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.

First, 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 make 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 covered the whole country, but the 1993–94 survey in particular excluded large parts of the country for security reasons. Furthermore, a large part of the population live close to the poverty line, either above it or below it. This is implies that even a small change in the poverty line will have a large impact on the head-count index, *i.e.* 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, even though 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 also matter. As discussed in Chapter One, there are reasons to believe that growth has not been translated into broad-based increases in incomes. Most of the growth has taken place in industry and services, which continue to employ a small proportion of the population. Growth rates in agriculture have not been 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, 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 (see Table 1.7). In agriculture, labour productivity is estimated to have fallen by 16 percent between 1992–93 and 1996. Although

[5] It should be noted that the figures refer to the situation before the onslaught of the regional crisis in 1997, which hit Indonesia particularly hard.

other factors apart from labour productivity affect poverty, it may be concluded that the economic performance in the past five years provides little ground for assuming there has been 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 to a large extent can 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 analyse whether there are any changes in these factors which may lead us to believe that poverty will diminish or increase. This issue is addressed in Chapter Four.

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 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 (NIS 1995:5). The geographic coverage of the survey was limited to only 15 of Cambodia's 21 provinces, and most provinces were only partially covered. The survey distinguished three main geographic areas: Phnom Penh, "other urban centres" and "rural areas," based on the census of villages prepared by the United Nations Transitional Authority in Cambodia (UNTAC). 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 covered 65 percent of the individuals of Cambodia and 68 percent of the households. The coverage ranged from 100 percent of the population living in Phnom Penh, to 90 percent of the population in "other urban areas," to only 60 percent 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 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 non-food 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 (Prescott & Pradhan 1997:5).

The updated 1997 *Poverty Profile* report is based on more detailed information collected on an annual basis from the core household questionnaire on demographic characteristics of household members, school enrolment, income and employment, social service access, utilisation and expenditures, and private consumption. The sampling frame for the 1997 survey covered about 90 percent of all households and 20 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 adds a measure of uncertainty to virtually

all economic and demographic analysis in Cambodia. As the results of the 1998 census become available, the situation in this regard will be much improved.

Chapter Four

Poverty Alleviation and Rural Development

The main causes of poverty in Cambodia, and particularly in 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.

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. Broadly speaking, the age groups born prior to 1980 are relatively small, reflecting the suffering during the Khmer Rouge period. On the other hand, the age groups born since 1980, that is those who are at present aged 18 or less, are relatively large, as a result of the "baby boom" which followed 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 percent of the population under the age of 15 in 1995. This distorted age structure has important implications for the economy.

Table 4.1. Distribution of Poverty by Household Size, 1997

Household size (people)	Frequency	Percentage poor[a]	Poverty gap[b]	Severity index[c]
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 or more	0.4	48.2	15.9	6.7
All	100.0	36.1	8.7	3.1

a Percentage poor refers to those below the poverty line as defined by the government and the World Bank.

b 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.

c Severity index is defined as the poverty gap index, except that the deficit is squared before it is averaged. Source: Poverty Profile 1997.

To begin with, the high proportion of children in the population implies a high dependency ratio.[1] In other words, each income earner has to support a high number of dependants. This has a generally depressing effect on income per head. At the household level, the ratio of economically active to non-economically active people, which in the Cambodian context reflects the number of children in the household, exerts a strong influence on poverty.

As Table 4.1 shows, the incidence of poverty is strongly related to the size of the individual household. Only 11.2 percent of the households with two persons are below the poverty line, but the incidence of poverty is much higher in the larger households, reaching a maximum of 58 percent in 10-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 decrease. The population has increased at a rapid pace from its nadir after the fall of the Khmer Rouge regime; from 6.5 million in 1980 to 9.1 million a decade later to 11.4 million in 1998 (implying an annual rate of growth of 3.3 percent 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. The pressure exerted by such a rapid population increase on the economy is particularly strong in a profoundly agrarian society such as that of Cambodia, because land, which for natural reasons is not amenable to expansion, is the main 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, has 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

[1] Dependency ratio is defined as the ratio of the non-working population to the working population.

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 rate in the coming decades. This is because the large age group 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 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 people or 17.5 percent in the coming five years. This

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

Age group	Labour force 1997	Labour force 2002	Growth (%)
15–19	661,422	810,327	22.5
20–24	626,565	1,052,869	68.0
25–29	783,999	624,945	-20.3
30–34	635,265	743,384	17.0
35–39	579,875	616,930	6.4
40–44	415,995	558,015	34.1
45–49	360,301	384,827	6.8
50–54	286,337	337,505	17.9
55–59	237,141	252,630	6.5
60–64	153,888	188,329	22.4
All groups	4,740,788	5,569,763	17.5

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. Sources: Huguet 1997, NIS 1998.

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, growth 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.

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 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 detailed census data implies that any estimate of the dependency ratio is subject to a margin of error. Thus, 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.[2] 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 income earner will gradually have fewer dependants to support.

[2] 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 reasons to expect any major changes in these rates (Huguet 1997:25).

Table 4.3. Estimates of the Dependency Ratio

	Demographic Survey (UNFPA, 1996)	Socio-Economic Survey 1997
Dependency ratio = total population - actual working pop. / actual working pop.	1.39	1.19
Dependency ratio = age groups (0-14) + age group (65+) / age groups (15-64)	0.92	0.78

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 in the labour force will take place at the expense of productivity. Concretely, this is likely to take the form of increased work sharing and under-employment 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, though 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 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.

1.1. 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 percent 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 4 to 5 percent 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 glance, 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 periods.[3] 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.

The past few years have seen a marked improvement in rice production. Total production increased by 55 percent, from 2.2 to 3.4 million tons, between 1994 and 1995 and has since remained more or less constant at 3.4 million tons. This sharp increase in production in the

Table 4.4. Rice Production Trends

Year	Production (thousands of tons)	Area (thousands of hectares)	Yield (kg per hectare)	Production per capita (kg)
1967/69	2,500	2,513	1,000	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	1,623	318
1996/97	3,458	2,171	1,593	308
1997/98	3,415	2,076	1,645	299

Figures refer to harvest years (June-May). Figures on rice production and cultivated land area are approximate. Source: Curtis 1989, WFP/FAO 1997, Huguet 1997, Agricultural Statistics 1998

past few years raises the question of whether there has been any fundamental change in agricultural practices and whether this 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. About 22 percent of the cultivated paddy land was never harvested, compared to only 8 percent in 1995 and 2 percent in 1993 (*Agricultural Statistics* 1998). There would also appear to have been some under-

[3] Rice production declined by 84 percent between 1970 and 1974 (Nesbitt 1996:9).

reporting of production in earlier years (WFP/FAO 1997:4). 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 1.35 million hectares in 1985/86 to 1.74 million hectares in 1990/91 to 1.83 million 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.

Table 4.5. Production of Wet and Dry Season Rice, 1993-97

	1993/94	1994/95	1995/96	1996/97	1997/98
Wet season rice					
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 per ha)	1,200	1,300	1,640	1,670	1,600
Production (1,000 tons)	2,008	1,728	2,802	2,759	2,673
Dry season rice					
Cultivated area (1,000 ha)	155	170	216	234	249
Harvested area (1,000 ha)	150	165	215	230	243
Yield (kg per ha)	2,500	3,000	3,000	3,000	3,000
Production (1,000 tons)	375	495	645	699	742

Source: Agricultural Statistics 1998

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. Although 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 percent of the total production. Another indication of improved cultivation practices is the increase 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 make 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 percent of what it is today.[4]

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

	Cambodia	Thailand	Vietnam	Malaysia	Philippines	Indonesia
Rice production (thousand tons, 1996)	3,390	21,800	26,300	2,065	11,284	51,165
Yield (kg per hectare, 1996)	1,739	2,364	3,603	3,129	2,856	4,515
Rice production per capita (kg, 1993)	330	371	350	100	163	255
Chemical fertiliser (kg per hectare, 1995)	2.3	71.0	214.0	164.0	63.0	83.0

Source: FAO 1997a, 1997b.

[4] In 1969/70, rice production peaked at 3.8 million tons, an increase of 1.5 million tons from 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 in the use of agricultural inputs, such as fertiliser and irrigation. Similarly, the use of high-yielding varieties of rice would appear to be much lower in Cambodia than in neighbouring countries, though 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 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.

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.

2.1. 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 sparsely populated and unsuitable for intensive agricultural production. About 70 percent of the rural population is concentrated on 30 percent of the land, stretching along a lowland corridor from the Thai border in the west, through the country to the border with Vietnam in the southeast, with the Tonle Sap, and the Mekong River in the centre. Less than a quarter 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. Although 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.

First, as has already been emphasised, the population is increasing quickly and will continue to do so in the foreseeable future. The population forecasts for 2010, already quoted, imply that if the rural/urban population ratio remains unchanged, there will be a reduction in the average amount of cultivable land per rural dweller by more than 30 percent. Second, there are large regional differences in the land/labour ratio. According to the *Cambodia Land Cover Atlas* of 1994 (UNDP/FAO 1994:7), there was already in 1992 less than 0.3 hectares of cultivated land per inhabitant in the most heavily populated provinces; Kandal and Kompong Cham. A survey in 1997 came up with similarly large differences in the land/population ratio. Thus in 1996/97, paddy land per capita ranged from 0.34 hectares in Svay Rieng province to 0.05 hectares in Kandal and 0.10 hectares in Kompong Cham and Kratie provinces. 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. 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 shortages and that more than a third of communes had a significant chronic deficit in rice production (WFP/FAO 1997:7). Unless, agricultural production increases 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.[5]

Third, 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 Sub-Decree 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, though the main *Socio-Economic Surveys* of 1993–94, 1996 and 1997 collected data on landholdings, 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 (World Bank 1996b).

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, since 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 land reform in a situation where the majority of the land holders receive fairly small amounts 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.[6] 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 provides convincing evidence of a rapid process of land differentiation and pauperisation in Cambodia today. Perhaps the most conclusive evidence is provided by the recent project on food security undertaken by CDRI and UNRISD.[7] The field data generated by this study in three villages revealed that the top 10 percent of the households (in terms of income) owned one-third of the land, while the bottom 20 percent had less than 4 percent 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 country had households which had never received any land and that 4.4 percent 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 percent 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 10 percent of the households (in terms of income) owned 30 percent of all animals, while the bottom 20 percent possessed as little as 0.4 percent of the animals. Unforeseen expenses resulting from illness would appear to be one of the more common reasons for loss of land (McAndrew 1998; Murshid 1998)

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5 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 an improvement of rural markets and integration of the rural economy.

6 Cases in point are Romania and other East European countries in the inter-war period.

7 See Murshid (1998) and McAndrew (1998).

Internally displaced people and returned refugees are particularly handicapped with regard to access of land, since 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 (Greve 1993:27–29; World Bank 1994). Despite efforts by the United Nations 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* privatisation 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 hits the poor particularly hard because, 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 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 in 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 pauperisation 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.

2.2. 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 percent of the total area cultivated with rice is irrigated. Yields from irrigated crops are 150–200 percent higher than rain-fed crops (Rickman *et al.* 1995). For instance the average rice yield for all provinces was 1.6 tons per hectare for rain-fed crops and 3.3 tons per hectare for irrigated crops. A survey of 197 farm households revealed that only about 10 percent of the farmers owned an irrigation pump (Rickman *et al.* 1995).

Farm power, most of which is draught animals, is a major capital investment of farmers. Its share has been found to be as high as 75 percent of total capital investment in farm mechanisation (Rickman *et al.* 1995). About 79 percent of the farmers interviewed owned at least one pair of draught animals, but only 1.5 percent 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 credit 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, Forestry, and Fisheries, Economy and Finance, the Council for the Development of Cambodia NGOs have been responsible for improving the efficiency of rural credit, strengthening the institutionalisation of private and NGO lending institutions, and mobilising resources from foreign donors. More recently, in 1998, the National Bank of Cambodia 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 10 percent 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 percent in the surveyed villages (Murshid 1998). For poor households, the percentage with outstanding loans was uniformly high and ranged between 89 and 94 percent. However, though it would appear that the poor as well as the better off have access to credit, the terms of credit are much worse for the poor. Even though 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 staggering. It was found that the average interest rate ranged from 53 percent for the "rich" households to 170 percent per year for the "very poor" (Murshid 1998). 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).

Table 4.7. Use of Loans (percentages)

Socio-economic class	Borrowing households	Rice purchases	Health treatment	Other purposes
Very poor	95.2	70.0	20.0	10.0
Poor	66.7	62.0	16.0	22.0
Marginal (negative)	81.8	40.0	17.0	43.0
Marginal (positive)	46.6	27.0	12.0	61.0
Well-off	71.7	11.0	9.0	80.0
Rich	32.0	0.0	0.0	100.0

a Borrowing households refers to households taking out loans in the previous four months. Source: Murshid 1998

2.3. Human Capital—Education

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.

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, the majority of the schools had been destroyed, and there was a total lack of books and educational materials (World Bank 1994:114). Cambodia has made a remarkable recovery and advances in the field of education since then. Today, there is a total of 6,100 schools in the country, with some 62,000 teachers and 2.3 million pupils (*Economic Indicators 1996/97*). Recent surveys also suggest that the literacy rate is rather higher than previously expected. According to the *1997 Socio-Economic Survey*, about 68 percent of the population over the age of 10 can read or write a simple message (NIS 1998).[8] The coverage of education has been remarkably broad, with the result that about two-thirds of the adult population today state that they are literate.

[8] Only a year earlier, the World Bank estimated literacy at 35 percent in the publication *Social Indicators of Development.*

However, the depth of education still leaves much to be desired and most of the literate population have only received very rudimentary formal education.

Table 4.8. Population Aged 25 or More by Educational Level

	Nationwide			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 (grades 1-6)	40.0	44.4	36.6	41.5	47.6	36.3
Secondary (grades 7-9)	14.7	21.1	9.7	12.7	19.1	7.6
High school (grades 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

Figures for each level include dropouts who began but did not complete the level. Source: NIS 1997.

By regional standards, the educational level in Cambodia remains very low. Within Southeast Asia, Cambodia together with Laos stands out as having 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 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, the poor educational level of the Cambodian people appears as something of an Achilles' heel.

The achievements in education, though impressive, give little comfort for the future. Although the coverage of education in Cambodia in terms of the number of young people 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, about 38 percent 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. About 78 percent (82 percent in rural areas) have no more than some primary schooling, and less than 6 percent have more than lower secondary schooling. Hence, though 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.

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 completely or were forced to repeat the grade. In subsequent grades, between 30 and 40 percent 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 Mondolkiri and Ratanakkiri, where only 20–30 percent 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 1997

The extremely high repetition rates and dropout rates in primary school 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 primary school in 1992/93, only 1 percent had education corresponding to upper secondary school level, while the majority (60 percent) had completed grade eight. Primary education also suffers 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 drop-out 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 per school	Teachers per school	Classes per school	Pupils per teacher	Pupils per class	Classes per room
Area						
Nationwide	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
Level						
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 1997

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 percent in 1989, to 11.1 percent in 1995 to 9.9 percent in 1997. In absolute terms, the allocation in 1997 amounted to a mere $9 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 par-

ents of pupils, but also by NGOs and international assistance.[9] 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 percent), "lack of interest" (16.3 percent) and "to earn money for the household" (15.1 percent). The cost affected girls more than boys. Among the female dropouts, economic reasons were stated in 43.0 percent of the cases.[10] 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 high repetition rates, particularly in primary school, aggravate the problem considerably. The additional cost of education to society and, in particular, on the individual parents of the high repetition rates is 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 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 low number of 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 (World Bank 1994:116). 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 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.

Although there is clearly a need to develop the system of secondary education, particularly in rural areas,[11] 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.

In addition to education, training can also contribute to productivity increases, with agricultural extension playing a potentially crucial role in an economy such as 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 Australian Catholic Relief introduced the subject through training existing agricultural agents and technicians. Diploma and degree graduates in various agricultural specialisations from the School of Agriculture at 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

[9] 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 the first grade to 458,300 riels for the sixth grade (UNDP 1997:44–45; Bray 1998:19).

[10] 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 dropouts was 30.0 percent (NIS 1997:81).

[11] 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 (NIS 1997:153–154).

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 low salaries from the government. Thus farmers have 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 cooperation with the Ministry of Agriculture, Forestry and Fisheries, 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 travel. About 500 agricultural staff have now been trained in agricultural extension. According to ministry officials, these trained workers are not functioning well because of their poor salaries.

2.4. 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 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 1,000 live births, and the average life expectancy among the lowest (54.4 years) (UNDP 1997:50–51). The *1997 Socio-Economic Survey* revealed that 14.7 percent of the surveyed individuals had been ill in the preceding month, suggesting an illness prevalence rate of about 1.8 episodes per year (World Bank 1998:37–38). This is corroborated by the CDRI/UNRISD food security survey which showed that between 40 and 50 percent of the surveyed households had suffered severe illness in the past year (Murshid 1998).

That illness is a common and severe reason behind the inability to work is obvious, though 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-month period per household (Murshid 1998).

Expenditures 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 heath centre costs on average 56,462 riels ($16), while inpatient services cost three to four times as much. 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) per visit. The average cost of treating illness by a visit to a "health provider" was 75,272 riels ($21.50) (World Bank 1998:17–18). For the poorest quintile of the population, these costs were lower, largely because they opted for cheaper forms of treatment.[12] Fees made up on average 62 percent of total health expenditures, while drugs accounted for another 33 percent. 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 are 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 expendi-

[12] The average cost 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.

tures of the poorest quintile of the population, while the cost of a hospitalisation would amount to more than six years of non-food expenditures for the same group.[13] The consequences of these high relative costs are, first, that adequate health care remains unaffordable to the poor and, second, that when health-related expenditures 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 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 exempted from paying any fee, as against 27.4 percent of those belonging to the highest quintile (World Bank 1998: 23).

Evidence from case studies suggests that expenditures 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 find it extremely difficult to improve their material situation again (Murshid 1998).

Although 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 the 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.

3. Insecurity, Lack of Rule of Law and 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. Although 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 percent of court cases concern land (Sokha n.d.). These disputes are typically between families over possession of a house or a farming plot, claims for recovery by dispossessed pre-1975 land owners, and illegal sales and forceful appropriation of land.

Decollectivisation of agriculture and privatisation of previously collectively farmed and held land almost invariably results 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 individuals 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 the direct supervision

[13] 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 riels for hospitalisation (World Bank 1998:17–18).

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 four million applications for land titles 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. 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 (Murshid 1998). 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 waged 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 general is widely recognised in Cambodia and is the subject of studies as well as policy discussion. The forest coverage of 13.2 million hectares (73 percent of the country) in 1969 was reduced to 10.6 million hectares (58 percent) in 1997. The most intensive deforestation appears to have occurred in the last few years (1993–97). In this period, another 700,000 hectares were deforested, accelerating the annual rate to over 180,000 hectares. If this rate is maintained, the rest of the 10 million hectares of forest area will be totally depleted in less than 60 years.[14] 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 suffered greatly 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 thousands of tons of crop production per annum were lost in the past five years, mainly due to floods and droughts.

Although part of the blame was placed on rural people whose poverty forced them to convert forest land to arable land, greater misconduct is 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 percent 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.

[14] Some sources estimate that in 1997 alone, about 450,000 hectares were deforested. At such a rate, the entire forest would be depleted in little over 20 years.

Table 4.11. Total Amount of Fish Caught, 1993–97

	1993	1994	1995	1996	1997
			Tons		
Total fish caught	108,900	103,200	112,510	104,310	29,500
Freshwater 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
			Percentage change from previous year		
Total fish caught		-5.2	9.0	-7.3	-71.7
Freshwater fish caught		-4.3	11.0	-12.4	-94.5
Maritime fish caught		-9.4	1.7	-2.3	-16.7

Source: Agricultural Statistics 1998

With the exception of 1995, the amount of fish caught that were officially recorded decreased drastically during the period 1993–97, as Table 4.11 shows. Sad to note, the 1997 production year saw a catastrophic decline in the catch. The reasons include the overcapacity 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 fish spawning grounds. The subsequent inundation of forest land has resulted in a decreased water depth and increased water temperature, which negatively affects fish reproduction. 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 electrical equipment are widely used to kill fish for sale and consumption. This not only destroys the 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 are processed into fertilisers and animal feed. Under 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 the 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 for 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 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. 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 (Charya 1998).

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 distributed 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 major 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 village leaders.

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 percent 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 translated into price effects on the domestic market, a decline in the demand for Cambodian products in neighbouring countries and a sharp fall in tourism. However, the impact on exports, FDI and on the balance of payments were mitigated by a rapid growth of the garment sector following the GSP derogation in July by the European Union and the granting of MFN and GSP status by the United States. As the financial crisis in Asia deepens, so too will its impact on Cambodia's economy. The small size and openness of the economy leaves 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 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 domestic 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. 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, and the riel appreciated from 4,200 to 3,200 to the dollar almost overnight. However, the vulnerability of the economy to any deterioration in the political situation in the country should remain a lasting lesson.

Although there may be grounds for cautious optimism with regard to 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 opportuni-

ties in these sectors. On the contrary, despite the declining contribution of agriculture to 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. First, 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 decrease. Second, 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. Third, a fall in the dependency ratio opens a window of opportunity, provided that the increases in labour 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 percent of the population earn 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 4 to 5 percent 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 enhanced 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 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 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 percent of the population live below the poverty line, placing Cambodia in the same league as Vietnam and Laos, but well below most other coun-

tries in the region. Poverty is most widespread in the rural areas; in Phnom Penh only 11 percent of the population live below the poverty line as against 40 percent 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 the 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 is 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 people 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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