

2. Poverty trends, 1994-2004

Summary

- Within those central parts of Cambodia that were surveyed in 1993/94 and again in 2004 (“the geographically comparable sampling frame”), the poverty headcount fell from 39 percent to 28 percent over the ten-year period.
- However, the peripheral and upland parts of the country that were *not* surveyed in 1993/94 were (and still are) poorer. It is possible to estimate the all-Cambodia poverty rate in 1993/94 based upon the trends in the geographically comparable sampling frame and what is known about population and poverty in the peripheral areas. Using this information, it is estimated that the poverty headcount in Cambodia as a whole fell from around 47 percent in 1994 (back-projected) to 35 percent (measured) in 2004. Given the doubts about some of the parameters and the imprecision of the resulting estimate, it is safer to state that the poverty rate in Cambodia in 1994 was somewhere between 45 and 50 percent. It is thus estimated that between 1994 and 2004, poverty in Cambodia has fallen by between 10 to 15 percent.
- Within the comparable geographical sampling frame, per capita household consumption—the measure of wellbeing that is used in this report and which is used to specify the poverty line—has risen 32 percent in real terms (i.e., allowing for inflation).
- The improvement in per capita consumption and corresponding fall in poverty rate has been observed in both rural and urban areas, and in all but one of the four rural agro-ecological regions. (In the fifth region—the Mountain/Plateau region—it is not possible to identify trends because the sub-sample for this region in 1994 was too small to yield statistically significant estimates.)
- Non-monetary indicators of well-being corroborate the picture of rising average living standards and falling poverty rates. The quality of housing materials, human development indicators, access to modern energy sources and ownership of consumer durables all suggest marked gains, including for the poor.
- While poverty reduction has been experienced across the population, the rates of improvement have not been uniform. The standards of living of the rural population—which started with the lowest average level of real consumption in 1994—grew at the slowest rate. Inequality has increased most notably *within* the rural population. Thus, while the poorest fifth of the rural population have made progress, this is relatively minor in absolute terms and they continue to fall further behind in relative terms, as the living standards of other groups improve at a much faster rate.

Newly available household survey data now makes it clear that there has been a significant fall in poverty over the decade since Cambodia began to emerge from conflict and embark on a “normal” development path. As economic activity has picked up, consumption of goods and services has risen, and the proportion of the population who live in households with per capita consumption values below the poverty line has fallen.

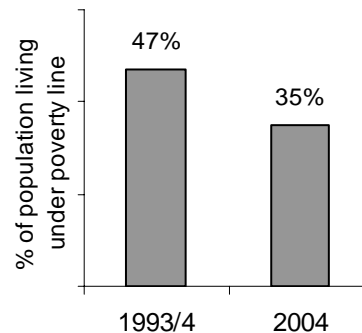
The best estimate of the scale of this shift suggests that the poverty headcount—that is, the proportion of the population living below the consumption poverty line—has fallen from 47 percent in 1994 to 35 percent in 2004 (Figure 2.1). Allowing for some doubt about the exact value of the headcount in 1994, it might be more defensible to say that poverty in 1994 could credibly have been anywhere between 45 and 50 percent. On this basis, we can say that poverty has fallen by between 10 and 15 percent over the last ten years—or by about 1 percentage point a year. This refutes the general impression of growth with little or no impact on poverty—an impression that took hold when poverty estimates from surveys over the course of the 1990s were compared, despite the fact that they were in fact simply not comparable.

Tracking poverty over time

For the first time, trend analysis is now possible

A number of large household sample surveys have been carried out in Cambodia since the early 1990s (Box 2.1). These have, to varying degrees, provided insights into patterns of consumption and, by extension, the proportion of the population that had consumption values below the poverty line. Until now, however, it was

Figure 2.1: Between 1994 and 2004, poverty fell by 10-15 percentage points



Note: Poverty in 1994 estimated by backward projection.

Source: SESC 1994, CSES 2004, World Bank staff projections.

not possible to measure poverty trends because the poverty estimates derived from these surveys were not comparable, for a variety of reasons.

Firstly and most importantly, none of the surveys covered the whole of the country and by extension the whole population. In theory, it should nonetheless have been possible to obtain partial insights into trends in the area of the country covered in the first survey by comparing poverty measures obtained from different survey dates within a common geographical sampling frame. In other words, by defining a sub-set of the sample covered in a later, more geographically extensive survey that was drawn only from the same geographical sample frame as the first survey—that is, by defining and applying a comparable (1993/94) geographical sampling frame to the data collected in subsequent surveys—it should have been possible to obtain reliable estimates of change within this area of the country. Unfortunately, it appeared until this year that the definition of the sampling frame used for the first survey (the 1994 SESC) had been permanently lost, making comparison with a baseline, even for just part of the country, impossible.

Box 2.1: Comparing mangos and bananas: measuring poverty in Cambodia, 1994-2004

The National Institute of Statistics (NIS) of the Royal Government has, with assistance from donors, conducted a number of national sample surveys of consumption and poverty amongst Cambodian households since the Paris Peace Agreement. These are:

- The 1993/94 Socio-Economic Survey of Cambodia (SESC) – henceforth referred to for convenience simply as SESC 1994.
- SESC 1996.
- The Cambodia Socio-Economic Survey (CSES) 1997.
- CSES 1999.
- CSES 2004 (actually conducted over 15 months from late 2003 through early 2005; however, unless otherwise noted values from this survey will be derived from the data collected in the 12 calendar months of 2004 only, hence this will be referred to as “CSES 2004” and not “CSES 2003-05”).

However, due to security problems at the time, the 1993/94 Socio Economic Survey of Cambodia was only able to cover 56 percent of rural villages and 65 percent of the rural population. Of “other urban” areas, only 84 percent of sampling units were covered. The areas not surveyed in 1993/94 were those where the Khmer Rouge were still active and remote parts of several provinces where accessibility was extremely difficult. Broadly speaking then, the areas excluded from the 1993/94 CSES were the remoter, forested highlands along the south-western, eastern and northern borders of the country, where fewer people lived but where levels of poverty were presumably, considerably higher than in the lowland core provinces that were covered in the survey.

In subsequent surveys, the coverage of the country in the sampling frames increased, including progressively more of these poorer and more remote rural areas. This expanding sampling frame, combined with differences in survey design and implementation, meant that the poverty rates derived from the surveys in the 1990s were simply not comparable, and could not be used to construct time series data for poverty. The 2004 Cambodia Socio-Economic Survey (CSES) was the first Cambodian household survey to be based on a sampling frame that includes all villages (which served as the Primary Sampling Units) in the entire country, drawing on the country’s first Population Census (conducted in 1998).

Note that in this chapter we only utilize information from the first survey (the 1994 SESC) but not any of the other surveys conducted in the 1990s. There are several reasons for this.

- The 1996 SESC collected much useful information, but its household consumption module was too limited (data on food consumption was collected as a single category, namely the total consumed during the last week). As a result, household consumption was seriously underestimated (and poverty over-estimated) compared to, for example, SESC 1994.
- Data collection for the 1997 CSES took place in only one round (June-July 1997). This period unfortunately coincided with deepening political crisis that was eventually to lead to political violence between the partners in the coalition government. There is good reason to believe the households were cutting back their consumption in anticipation of political turmoil; the low consumption values and high poverty rates recorded in CSES 1997 do not seem to be representative of the actual standard of living in the first half of 1997, given the progress observed in other indicators of wellbeing. For this reason, we have decided not to include the 1997 data.
- Finally, the data collected in the 1999 CSES show irreconcilably large differences between the two rounds of the survey. The consensus is that standards of training and supervision for the first round were not adequate, resulting in under-recorded consumption and exaggerated poverty; the levels of household consumption recorded in the second round (after much-improved training and supervision had been put in place) were much higher, and the poverty estimates thus much lower. After much discussion among experts and the Government, it has been agreed that the consumption data in the 1999 CSES is not reliable and does not support comparison of poverty rates with other surveys.

Secondly, changes in survey design and implementation from one survey to the next meant that data (particularly the critical consumption data that is used to construct poverty lines and calculate poverty rates) was collected in different ways. As a result, findings from one survey could not easily or credibly be compared with those from another, even if it were possible to compare the same geographical sample between surveys.

In mid-2005, a hard copy of the sampling frame of the first survey (the 1994 SECS) was rediscovered in NIS. This, combined with a good match between the construction of the consumption module in the 1994 SESC and the 2004 CSES, has made it possible, for the first time, to compare household consumption and poverty within the same geographical areas between 1994 and 2004.

This chapter therefore provides for the first time information on trends in living standards (real per capita household consumption) and poverty rates between 1994 and 2004. It does this firstly by comparing change within a geographically comparable subset of the 2004 CSES with baseline data from the first Cambodian household survey, the 1993/94 Socio-Economic Survey of Cambodia (SESC).

Having provided the dynamic analysis of trends in this chapter, the next chapter will then describe in more detail the key features of poverty in Cambodia in 2004, using the full CSES 2004 sample (i.e. data collected in 2004 from households within the 1994 geographically comparable sample frame *and* data from households outside this frame).

Setting the poverty line

Setting a poverty line is an attempt to specify what level of individual consumption of goods and services

(measured in terms of expenditure—money spent—or expenditure equivalent) is necessary for a decent standard of living. Technically speaking, Cambodia's baseline poverty line consists of a single national reference food bundle and three regional non-food allowances. The baseline values are in 1993/94 Riel and refer to daily per capita levels of food and non-food consumption.

The *food poverty line* is based on the estimated cost of a basket of food that would provide a subsistence-level dietary intake of 2,100 calories per day. This is based on the quantities of different foods consumed by persons in the third quintile of the per capita consumption distribution (as this was the first quintile in the 1993/94 SESC that met the 2,100 calorie minimum). Someone who consumes less than the food poverty line is not receiving the minimum amount of food (calories) necessary to maintain their health, and in theory has no ability to meet non-food consumption needs for clothing, shelter, medical care, and so on.

In reality, even the very poor need to consume a minimum of non-food goods and services. To calculate the overall poverty line, *non-food allowances* are derived from the non-food consumption of Cambodians whose total per capita household consumption is just equal to the food poverty line; that is, the non-food allowance is the amount of consumption that food-poor individuals divert from food consumption to non-food consumption.

The non-food allowances, added to the food poverty line, yield the *overall poverty line*. Table 2.1 presents updated food poverty lines, non-food allowances and total poverty lines for Cambodia.

Annex 1 discusses in detail the procedures used in setting poverty lines for analysis of SESC/CSES data, including such issues as

Table 2.1: Updated food poverty line, non-food allowances, and total poverty lines

Region	1993/94	2004
Food poverty lines (current Riel per capita per day)		
Phnom Penh	1,185	1,782
Other Urban	996	1,568
Rural	882	1,389
Non-food allowances (current Riel per capita per day)		
Phnom Penh	393	569
Other Urban	269	384
Rural	236	364
Total poverty lines (current Riel per capita per day)		
Phnom Penh	1,578	2,351
Other Urban	1,265	1,952
Rural	1,118	1,753

Source: SESC 1994; CSES 2004.

how allowances have been updated to allow for inflation.

Measuring poverty

Once a poverty line has been defined, the distribution of per capita household consumption is compared to this line to generate a set of different measures of poverty. Box 2.2 describes in basic terms the three commonly-used poverty measures that will be referred to throughout this document.

Box 2.2: Measuring poverty: headcount, gap and severity

Standard international practice for measuring poverty involves the use of three mathematically interrelated indices of poverty, first presented by Foster, Greer and Thorbecke (1984). These poverty measures—known as FGT measures—are:

- The *poverty headcount index* (P_0), also sometimes referred to as the poverty incidence or simply the poverty rate. This is the most commonly used measure and the easiest to understand. Very simply, it expresses the percentage of the population with per capita consumption below the poverty line;
- the *poverty gap index* (P_1), which is the average difference in the total population between individual's recorded per capita consumption and the poverty line, with a zero value assigned to those above the poverty line; and
- the *poverty severity index* (P_2). This is calculated by first squaring individual poverty gaps before averaging them. This gives greater weight to larger poverty gaps, and provides insights into the distribution of very low consumption values (i.e. extreme poverty).

Key findings

The poverty rate has fallen in both rural and urban areas

Within the geographically comparable sample frame, the poverty headcount (that is, the percentage of the population living under the poverty line) has fallen from 39 percent in 1994 to 28 percent in 2004. When this rate of *known* poverty reduction is combined with estimates of the distribution of the total population between areas within and outside the 1994 sampling frame, we estimate that poverty in the whole of Cambodia has fallen from 47 percent to 35 percent between 1994 and 2004 (Box 2.3).

Box 2.3: Backward-projection of national poverty estimates for 1994

Although the CSES 2004 was the first survey that sampled the entire country, it is possible to use existing information and postulate some simple assumptions to estimate 1994 poverty measures for the excluded areas, and in turn backward-project poverty measures for the entire country in 1994. This backward projection is useful because it provides a best-informed guess of the poverty situation for the entire country in 1994. Whatever the estimates may be, this enables a discussion about which hypotheses can be ruled out (e.g., stagnant, modest, or rapid poverty reduction), and whether the estimates are plausible given the situations then and now. The key requirements for this exercise are: (i) the *population shares* of areas included in and excluded from the SESC 1994 sampling frame in both 1994 and 2004; and (ii) the *poverty measures* of included areas in years 1994 and 2004 and of areas outside the comparable sample frame in 2004.

Combining the 1994 and 2004 sampling frames and the 1993-2004 population projections calculated from the 1998 Population Census (Neupert, 2005), we estimated: (i) the share of population in the areas excluded from the SESC 1994 sampling frame in 1994 and in 2004; and (ii) the shares of population included in the SESC 1994 sampling frame in 1994 and in 2004. From the SESC 1994 and the CSES 2004, we could estimate the poverty incidence for: (i) included areas in the SESC 1993/94's sampling frame in 1993 and in 2004 and (ii) excluded areas from the SESC 1993/94's sampling frame in 2004. It is possible to construct a few scenarios for poverty reduction rates in excluded areas from the SESC 1994 sampling frame. The main text presents just one scenario, in which the rate of poverty reduction in excluded areas is assumed to be the same as that in included areas, within the same strata.

Scenario 1: Best informed poverty estimates for all Cambodia in 1993/94

	Population shares	Poverty Headcount (%)	Poverty Gap (%)	Poverty Severity (%)
▪ Phnom Penh	0.0758	11.4	3.0	1.2
▪ "included" areas in Other Urban	0.0567	36.6	9.6	3.6
▪ "included" areas in Rural	0.4670	43.1	10.0	3.3
▪ "excluded" areas in Other Urban	0.0414	63.5	14.5	4.9
▪ "excluded" areas in Rural	0.3591	59.1	16.7	6.2
▪ Cambodia		47.0	12.0	4.3

This is the best-informed assumption because there is no other hard data (such as provincial GDP or agricultural revenue) to suggest otherwise. Nonetheless, other scenarios of poverty reduction are also plausible; we present two below. In the first, poverty is assumed to have been stagnant (i.e., no reduction) in the excluded areas; and in the second, poverty in excluded areas (rural and urban) fell at the same rate as in the urban areas that were included in the 1994 sampling frame.

Two alternative scenarios of poverty estimates for the entire Cambodia in 1993/94

Assumptions/Scenarios	Poverty Headcount (%)	Poverty Gap (%)	Poverty Severity (%)
(1) Poverty is stagnant (no reduction) in all excluded areas	41.1	10.5	3.8
(2) Poverty in rural and urban <i>excluded</i> areas fell at the rate of urban <i>included</i> areas	55.2	14.0	4.9

Source: SESC 1994, CSES 2004, sampling frames for SESC 1994 and CSES 2004, Neupert (2005).

A poverty headcount of 47 percent for Cambodia in 1994, at per capita GDP of \$211 in constant 2000 US\$, does not seem unreasonable. In neighboring Lao PDR, the poverty headcount in 1993 was 46 percent, at per capita GDP of \$247 in constant 2000 US\$ (World Bank, 2005); while in Vietnam, the poverty headcount was estimated at 56 percent in 1993, at per capita GDP of \$265 in constant 2000 US\$ (World Bank, 1999). In other words, a poverty headcount of between 45 and 50 percent in 1994 seems credible in the context of Cambodia's GDP at that time.

Looking only at trends within the comparable sampling frame (i.e. at trends in measured as opposed to back-projected poverty rates), it is clear that poverty rates have fallen in both urban and rural areas (Figure 2.2). As would be expected, the proportion of the population living under the lower, more severe food poverty line has also fallen, at about the same rate (slightly slower in urban areas, marginally faster in rural areas).

Figure 2.2: Poverty--and food poverty-- have fallen in both urban and rural areas

- Percentage of population under poverty line/food poverty line, 1994 and 2004 (geographically comparable sample)

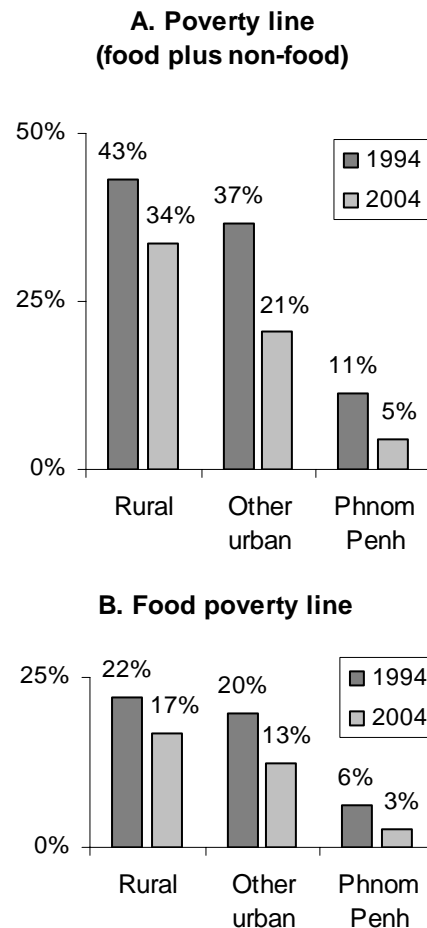
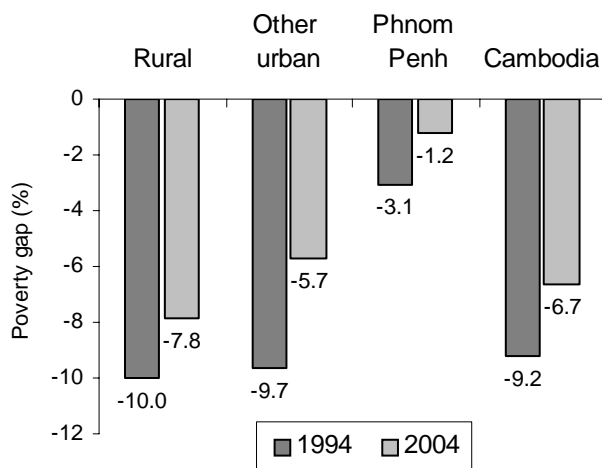


Figure 2.3: The depth of poverty has declined in both urban and rural areas

- Poverty gap (average distance by which consumption of the poor falls short of the poverty line, as % of poverty line), 1994 and 2004 (geographically comparable frame)

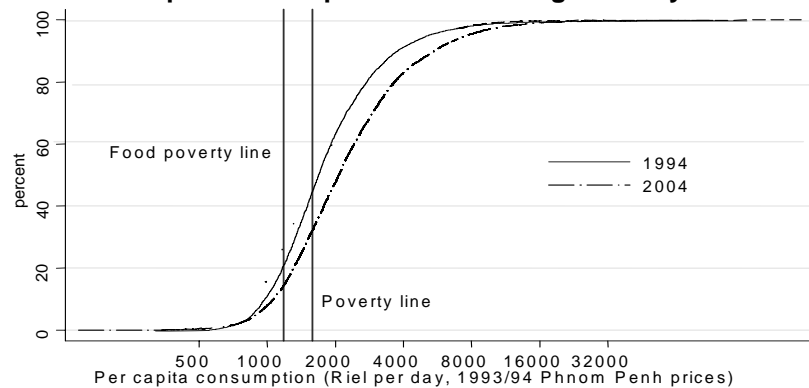


Source: SESC 1994, CSES 2004.

Source: SESC 1994, CSES 2004.

...as has the depth of poverty

Given that both poverty and food poverty headcounts have fallen, it is only to be expected that the depth of poverty has also declined. Figure 2.3 shows change in the poverty gap index, which essentially measures the average amount by which the per capita consumption of poor individuals falls below the poverty line. As the living standards of the poor (as measured by real per capita consumption) have improved, in some cases carrying them over the poverty

Figure 2.4: Per capita consumption increased significantly over the last ten years

Source: SESC 1994, CSES 2004.

line and in other cases merely taking them up towards the line, so the poverty gap has been reduced. Poverty is, as expected, deepest in the countryside and very shallow in Phnom Penh.

Real consumption has increased for the vast majority

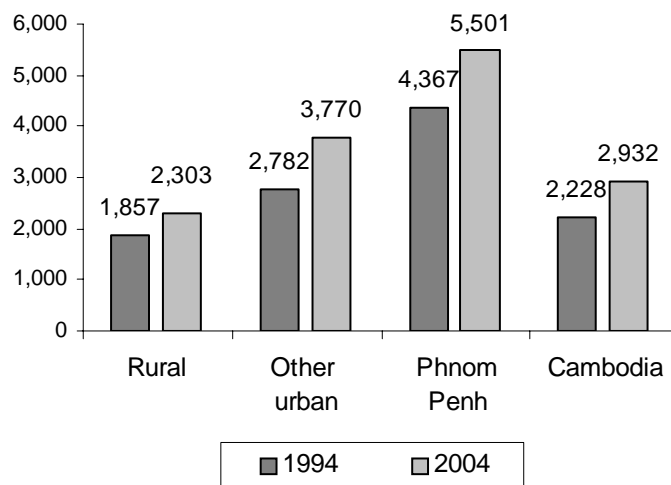
Figure 2.4 presents the cumulative distribution function of real per capita consumption, based on geographically comparable samples (i.e., households from villages that were included in the 1993/94 SESC sampling frame) as well as the food poverty line and the overall poverty line in 1993/94 Phnom Penh prices. It shows that real per capita household consumption increased for all segments of the population distribution between 1994 and 2004, as seen in a clear shift to the right in the cumulative distribution. One important implication is that poverty incidence would be estimated to have decreased during this 10-year period for any conceivable poverty line.

Consumption has risen in the countryside as well as the towns, but by a lesser amount, from a much lower base. Within the

geographically comparable frame, real consumption (defined in terms of average per capita household consumption, measured in 1993/94 riels per day) rose 32 percent (from 2,228 to 2,932 riels per capita per day) in the nation as a whole. The fastest rise in average consumption (36 percent) was found in urban areas outside Phnom Penh, while the slowest rise (24 percent) was found in rural areas (Figure 2.5).

Figure 2.5: Consumption has risen in rural areas—but more slowly than in urban areas

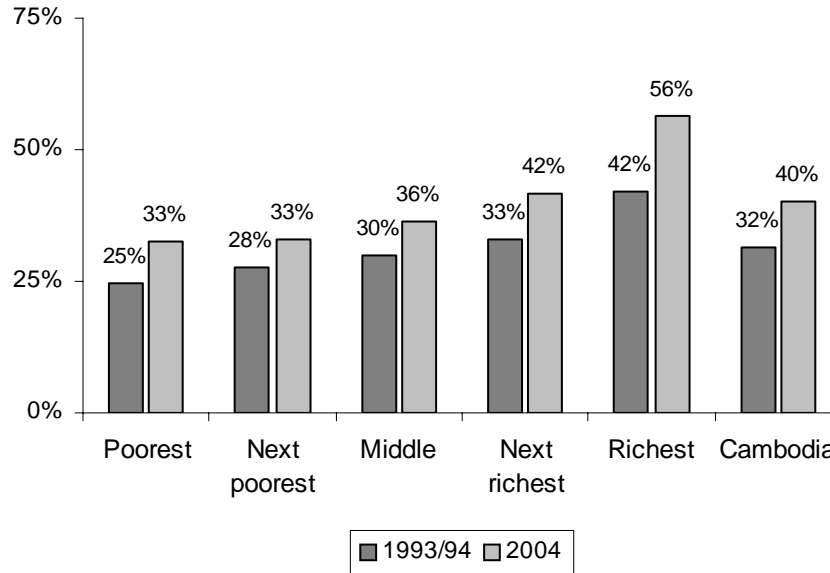
- Average per capita consumption (mean riel per day, 1993/94 constant prices)



Source: SESC 1994, CSES 2004.

Figure 2.6: Households—including poor households—can now afford to spend more on non-food items

- Non-food consumption as a % of total household consumption, 1994 and 2004, by per capita consumption quintile



Source: SESC 1994, CSES 2004.

...leading to increased spending on non-food items

Reinforcing the impression of rising living standards and falling poverty, Figure 2.6 shows that the share of non-food consumption in total consumption has been rising for all quintile groups between 1993/94 and 2004. Given that the first priority for household consumption is always food, and that the food share of total consumption is inversely correlated with wealth, an increasing non-food share in total consumption corroborates the picture of falling poverty headcounts. This implies that poor and non-poor households can now better afford to meet their non-food needs than was the case in 1994.

Higher living standards are confirmed in other indicators...

Household surveys in Cambodia have collected data on a large number of socio-economic indicators in addition to household consumption. As with the non-food share of total consumption, these socio-economic indicators are very useful as a cross-check on the accuracy of the picture of poverty reduction obtained from the poverty line measures of headcount, depth and severity; indeed, they are often regarded as more reliable than household consumption or income as a measure of real wealth. They also provide insights into non-monetary dimensions of poverty, such as education and health status, which may not be captured in consumption data. Non-income indicators such as ownership of household durables, housing quality and use of modern sources of energy indicate that living standards of the population in

general and of the poor in particular have improved remarkably between 1993/94 and 2004. Among the poorest fifth of the population, ownership of a television increased ten-fold (from 3.4 to 36 percent), while access to generator- or battery-powered lighting increased from 1.6 percent to 28 percent (Figure 2.7). Among this bottom quintile, far more now live in houses roofed with galvanized iron or aluminum, compared to ten years ago, when a large proportion of houses were covered in thatch (Figure 2.8).

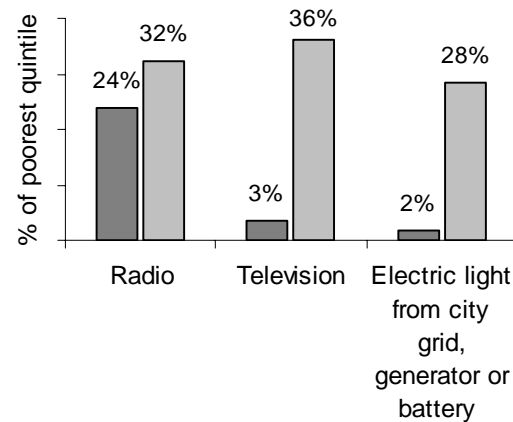
The supply of basic services has improved considerably. This is starting to emerge in some human development outcome indicators. Between 1997 and 2004, net enrollment and completion rates at the primary level increased by over 10 percentage points among children from the poorest fifth of the population (Figure 2.9).

However, the size of increases in consumption has varied considerably

While consumption has grown for all quintiles between 1994 and 2004, this growth has not been experienced evenly, with rural areas growing most slowly (Figure 2.5) and demonstrating continued higher levels of poverty (Figure 2.2). In 1994, real consumption in rural areas was 67 percent of that in other urban areas: this fell to 61 percent in 2004.

Similarly, the growth in consumption has not been uniform across consumption quintile groups. Figure 2.10 shows clearly that while real per capita consumption increased significantly in all quintile groups during 1994 through 2004, the relative gains were inversely related to the initial level of average per capita consumption. Real per capita consumption in the poorest quintile increased by only 8 percent, but rose by 45 percent for the

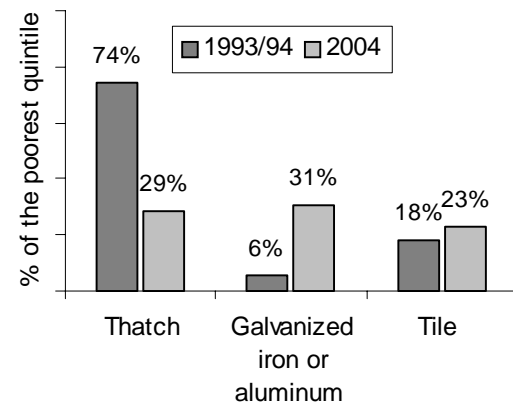
Figure 2.7: The poorest fifth of the population own more assets and have better access to electricity than in 1994



Source: SESC 1994, CSES 2004.

Figure 2.8: The poorest 20 percent also live in better houses than in the past

- Primary roofing material

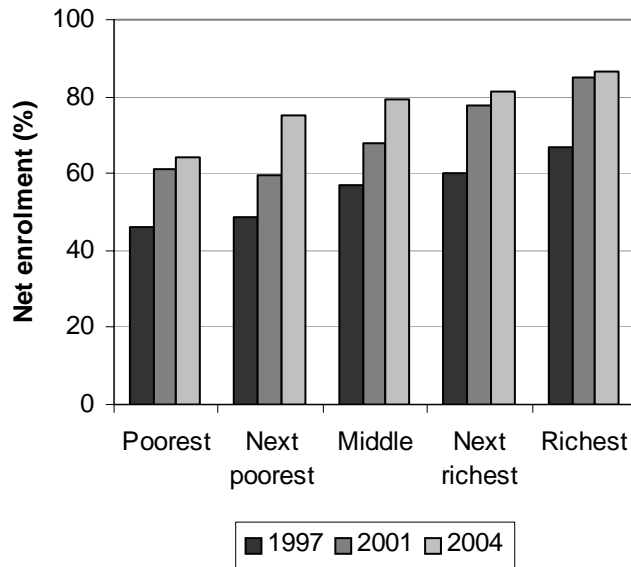


Source: SESC 1994, CSES 2004.

richest quintile. As a result, the shares of consumption of the poor in the country's total consumption fell between 1994 and 2004.

Figure 2.9: Net primary enrolment has improved for all groups

- Children aged 6-11 years in primary school as % of population in these years, by per capita consumption quintile



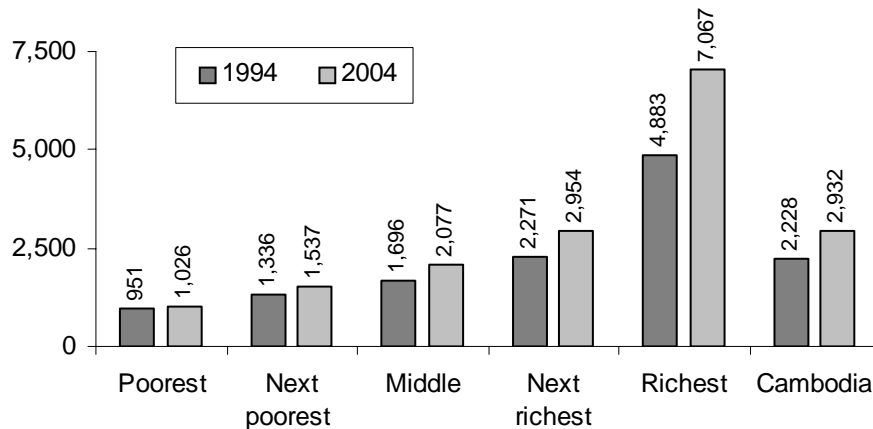
Source: CSES 1997, CLS 2001, CSES 2004.

The rate of poverty reduction has thus been uneven...

Progress in poverty reduction was also not uniform among the poor themselves. The extreme poor have experienced significantly slower growth in real consumption than the “average” poor. Because the SESC and CSES were not panel surveys (i.e., CSES did not revisit the same sample of households as SESC), we are not able to comment directly on the transition of the population into and out of poverty. Nevertheless, the cross-sectional information still allows us to conclude that a substantial proportion of the barely poor (i.e., those whose consumption falls short of the poverty line by a relatively small amount) had exited poverty, whereas the magnitude of consumption shortfall of the extreme poor, and the proportion of the extreme poor among the entire

Figure 2.10: Over the last ten years, per capita consumption amongst the poorest fifth has risen by only 8 percent—compared to 45 percent amongst the richest fifth of the population

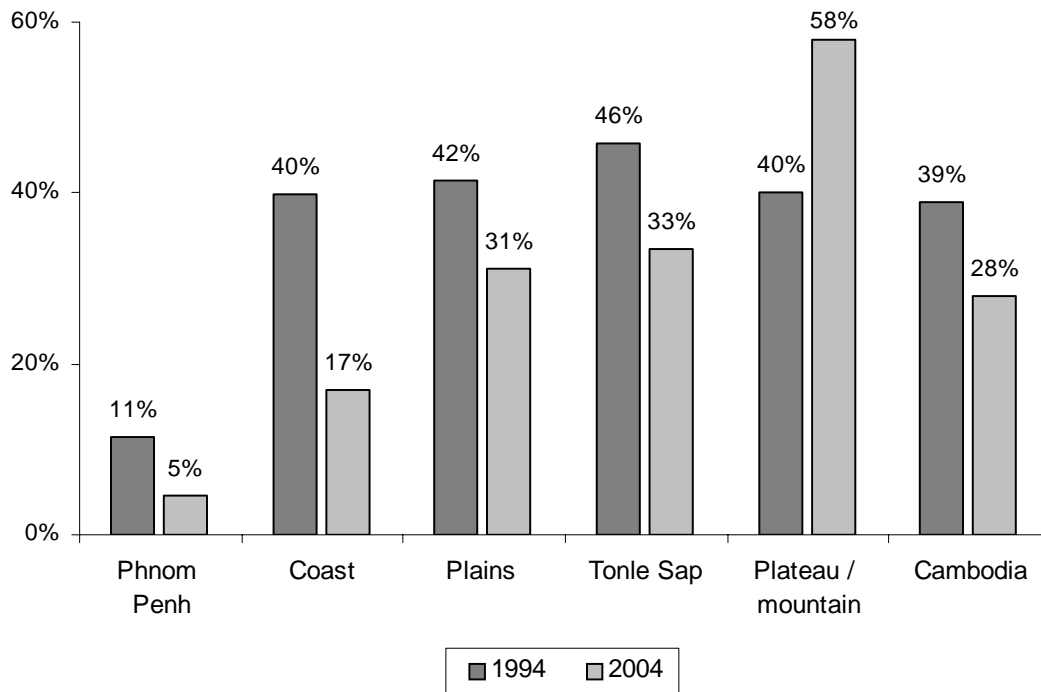
- Real average per capita household consumption, 1994 and 2004, within the geographically comparable sample frame



Source: SESC 1994, CSES 2004.

Figure 2.11: Poverty has fallen much faster in Phnom Penh and the Coast

- Poverty headcounts (% of population living under the poverty line), 1994 and 2004 (geographically comparable sample), by agro-ecological region.



Source: SESC 1994, CSES 2004.

Note that the small size of the comparable sample coverage in the Mountain/Plateau Provinces means that the poverty headcounts are estimated with large standard errors and the increase in headcount is not statistically significant.

poor population, was as acute in 2004 as it had been in 1994.

The pattern of growth and poverty reduction is also widening the differences in poverty rates between different parts of the country. Poverty has fallen fastest in Phnom Penh and the Coastal region, which has now pulled considerably ahead of the Tonle Sap and Plains regions (Figure 2.11).

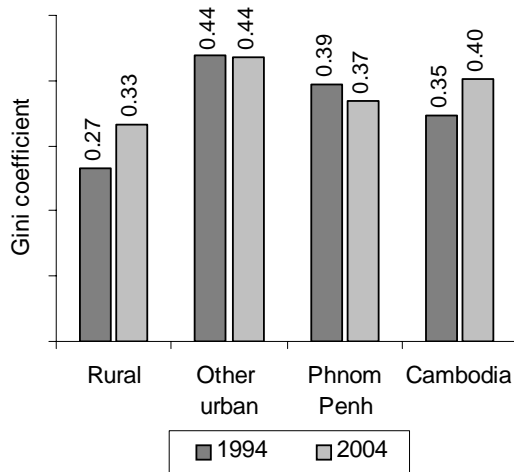
...and inequality has risen

The Gini coefficient provides a useful summary measure of inequality in the distribution of income or consumption: a value of zero signifies perfect equality in distribution, while a value of 1 indicates perfect inequality. Estimates of Gini

coefficients for Cambodia confirm that inequality rose considerably within the geographically comparable areas between 1994 and 2004, driven primarily by increased inequality within the rural areas (Figure 2.12). The rate of increase in inequality seen in Cambodia is unusually fast. Decomposing inequality changes into within-group and between-group changes, we find that 86 percent of total increase in inequality was attributable to increased inequality within the rural region and only 14 percent to a rise in rural-urban inequality.

Figure 2.12: Inequality rose in rural areas, and in the country as a whole

- Gini coefficients (0 = perfect equality, 1 = perfect inequality) for per capita real consumption, 1994 and 2004 (comparable sample frame)



Source: SESC 1994, CSES 2004.

The impression of rapidly growing inequality, both between urban and rural areas and within rural areas, is something that is strongly felt in popular debate, including at the village level. Box 2.4 summarizes some of the comments from one of the nine fieldwork sites in the MOPS research project. Similar comments were recorded in other sites.

Rising inequality is of course inevitable in the transition from a very poor, centrally-planned economy to one based on market principles. As long as inequality increases in parallel to a significant fall in absolute poverty, it could be argued that inequality *per se* is not a problem. However, an increasing volume of international research points to the strong connections between high levels of inequality and slow rates of economic growth and poverty reduction (see for example World Bank 2005; Naschold 2002). What is interesting about the MOPS accounts is the feeling that

Box 2.4: Perceptions of inequality amongst rural youths

If there is a sense of greater security and basic freedoms in rural communities, there is also a sense of growing inequality in the opportunities available to the children of rich and poor families.

The rich have enough food to eat while the poor have nothing. The rich are brave and powerful while the poor don't have any of these things. A son of the rich has very clean and good clothes while I am a poor son and wear dirty clothes (male youth).

Since 1998, the well-being of people in this community has been largely increasing. The rich become richer while the poor remain trapped in poverty or become worse off. The reason for the inequality of people in this community is that the better-off have large arable land and are able to hire the poor and destitute to work for them. They just use only their brain and money in order to get high earnings, while we use strong labour and get very little pay in return (female youth).

Some noted that inequalities in wealth meant that the rich are able to enjoy freedoms that are largely theoretical for the poor.

We have freedom to do what we want, especially searching for jobs both inside and outside the village in order to support our own stomach and other members in the family. But unfortunately the rich has more freedom than the poor because they have money and can entertain whenever they want (young woman from poor household).

If we want to join the community's ceremony at night we should ask for permission from our parents first. But normally we cannot go because of the fact that we don't have money and we have to work hard in the morning (female youth.)

If one wants to have freedom one should have enough rice to eat (female youth).

Source: MOPS focus group discussions with youths in Andong Trach village, from CDRI 2006a (forthcoming).

inequalities are growing not only in terms of outcomes but also opportunities. There is a perception that the poor, with few assets, social connections or opportunities for education, are increasingly trapped in low-skilled, subsistence-level manual work are not able to compete on equal terms with the rich.

This theme will be explored in more detail in the next chapter, which discusses the level of inequality in 2004. For the moment, however, it is simply noted that if the benefits of growth over the last ten years had been more evenly distributed between the rich and the poor, the rate of poverty reduction could have been significantly greater. The experience of countries (e.g. Vietnam) which have created broad-based growth which includes the poor to a greater degree suggests also that such patterns of shared growth are more stable (and often higher) than growth patterns (such as that seen in Cambodia) which are based on a few enclave sectors and in which the benefits of growth accrue disproportionately to those who are already rich.

Moving in and out of poverty: panel data analysis

When determined by random sample survey, aggregate change in the poverty headcount between any two points gives us the change between two snapshots, but a poor sense of actual household trajectories over that time period. The change in headcount may disguise considerable diversity in the actual experiences of individuals or households. The same change in overall poverty rate, in other words, could be the product of either a steady across-the-board improvement in living standards, in which the non-poor stay out of poverty and a proportion of the poor escape poverty; *or* a more dynamic

situation in which substantial numbers escape poverty, but a significant number of previously non-poor also move in the opposite direction, falling back into poverty, the balance between these two transfers resulting in the net change in headcount. This is important, because experience in other countries show that success in poverty reduction typically requires a combination of ladders—creating opportunities for the poor to escape poverty—and safety nets, which prevent the non-poor from falling into poverty, or the poor from falling into destitution. The policies and programs that are needed to address vulnerability are often quite different from those that are required to help the currently poor; similarly, the chronic or long-term poor require different forms of assistance to the transitory, short-term poor.

How stable are the categories of poor and non-poor?

To investigate these longitudinal issues, the Moving out of Poverty Study (MOPS) designed and carried out by CDRI resurveyed in 2004/05 just under 1,000 households that had previously been surveyed in 2001. The result is a set of insights into the balance, over three years, between the chronic poor (those who remain poor in both years); the stable non-poor; those who have escaped poverty; and those who have fallen into poverty¹.

¹ Panel studies typically focus on the difference between the chronic poor (alternatively called the “always poor”) and the transitory poor (or “sometimes poor”) who spend a period in poverty before escaping (and possibly falling back into poverty again later). It is only really possible to define the transitory poor when there are three time-points under observation, as MOPS has completed only two rounds to date (2001 and 2004) we cannot label a transitory poor group yet.

Measuring the direction and scale of change in household living standards

Given the difficulty of accurately or precisely measuring consumption in multi-purpose household surveys, there is a reasonable concern that analysis based solely upon whether households crossed an exact poverty line might give a false impression of precision. Instead of such a binary poor/non-poor division, we have opted to conduct initial analysis of the household dynamics in the MOPS dataset on a three-fold classification of household well-being at any one point in time. This approach distinguishes the clearly poor (those well below the nominal poverty line, labeled the “very poor”); the clearly non-poor (those well above the poverty line, labeled the “well-off”); and those falling in a band 20 percent above and below the poverty line, labeled for convenience the “moderately poor”. On the basis of the per capita household expenditure recorded in MOPS, each of the 890 households that were surveyed in 2001 and 2004 were classified into one of these three bands for both survey years. Comparing status in 2001 with status in 2004 gives us nine groups, shown as nine cells in Table 2.2, each of which is defined in terms of the movement (or non-

movement) of households over the three-year period between surveys.

The three shaded cells running diagonally down the middle of Table 2.2 represent households that have not changed their status between 2001 and 2004. Whether they were very poor, moderately poor or well-off in 2001, they remained in the same group in 2004. Those who were very poor in both rounds are labeled the chronic poor. This group accounts for about 14 percent of the MOPS sample. Those “static middle” group who began and ended the period in the “moderately poor” category accounted for another 14 percent. Finally, the “comfortable rich” who remained well-off in both 2001 and 2004 accounted for the single largest group in this transition matrix, with 24 percent of the sample. Taken together, these non-movers account for around 51 percent of the whole sample, implying a degree of stability for many rural households, at least over a relatively short, three-year period, and within these three broad wealth groups.

The remaining 49 percent, however, changed their status upwards or downwards by either one or two positions. Slightly more households moved up (24.5 percent, comprised of the three groups in

Table 2.2: Transition matrix of panel households

		2004		
		Very poor	Moderately poor	Well-off
2001	Very poor	14 percent (1: Chronic poor)	10 percent (6a: Climbing out of poverty)	4 percent (6b: Rags to riches)
	Moderately poor	7 percent (4: Deepening poverty)	14 percent (2: Static middle)	12 percent (7: Climbing into wealth)
	Well-off	3 percent (5a: Riches to rags)	12 percent (5b: Slipping into poverty)	24 percent (3: Comfortable rich)

Source: CDRI 2006a (forthcoming).

the top right third of Table 2.2) than moved down (22.3 percent, allocated amongst the three groups in the bottom right third of the Table).

Only a few households (around 7 percent) experienced a dramatic change in status, defined in terms of a movement upwards or downwards by two categories (i.e. from very poor to well-off—labeled “rags to riches”; or from well-off to very poor—labeled “from riches to rags”). Given the small size of these two groups (each containing only 3.5 percent of the nine-village sample, or about 30 households); we combine these two groups with neighboring groups for the purposes of

subsequent analysis (Table 2.2 and Table 2.3).

Explaining changes in household fortunes

Livelihood strategies and their dynamics are complex, so it is not entirely straightforward to identify what correlates of change in household status can be taken as cause of that change, rather than an adaptation or coping strategy arising out of it. We therefore present a relatively straightforward preliminary description of changes in household characteristics at this stage. More detailed analysis will be

Table 2.3: Changes in per capita consumption and in positions within the income distribution of panel households, 2001-2004

Group	Change in position	percent of households	Mean p.c. household consumption (riels per day)	
			2001	2004
No change				
1. Chronic poor	0	14.0 percent	849	1,093
2. Static middle	0	14.3 percent	1,460	1,716
3. Comfortable rich	0	24.4 percent	2,931	3,362
Worsening situation				
4. Deepening poverty	-1	7.1 percent	1,424	1,166
5. Falling into poverty		15.2 percent	2,353	1,642
5a. Rags to riches	-2	3.3 percent		
5b. Slipping into poverty	-1	11.9 percent		
Improving situation				
6. Escaping poverty		13.3 percent	968	1,960
6a. Climbing out of poverty	+1	9.8 percent		
6b. Rags to riches	+2	3.5 percent		
7. Climbing into wealth	+1	11.8 percent	1,459	3,296

Source: CDRI 2006a (forthcoming).

included in the CDRI MOPS synthesis study to be published by CDRI in 2006.

Initial analysis suggests that rising total incomes have buttressed the position of the non-poor. The chronic poor, meanwhile, appear to be trapped in low-income activities, preventing them from saving or investing in ways that might lead to an escape from poverty. Those households who fell into poverty, unsurprisingly, experienced a large drop in income. Similarly, those who have seen their consumption decline (falling into poverty and deepening poverty) have seen the value of total household assets decline between 2001 and 2004, while all other groups—including even the chronic poor—have accumulated a greater total value of assets.

The relationship between household dynamics and changes in the composition of income is extremely interesting. Figure 2.12 plots percent change in each source of income for each group. The role of common property resources in household income declined for almost all groups, while income from agriculture fell for those who became or remained very poor, and increased for those who were or became well-off, and for those who moved upward or remained in the middle, moderately poor group. Income from self-employment, labor and “other” sources have become far more important, with labor appearing to be particularly important in helping households move out of the very poor group, while self-employment helped the moderately poor to move into the ranks of the better-off.

Thus for the chronic poor, the most important source of income in 2004 (38 percent of the total) came from hiring out their labor, compared to 23 percent from agriculture and 18 percent from common property resources (CPR). This marks a

considerable change from 2001, when income from CPR was nearly as important as agriculture (28 percent compared to 33 percent), and labor contributed only 28 percent.

Those falling into poverty were characterized by a fall in income from agriculture and CPR, and a rise (in absolute and proportionate terms) in income from self-employment and labor. This reflects that for many, floods or droughts over recent years have affected rice farming; many of the MOPS villages have also experienced quite dramatic declines in fish catches. These are trends that are broadly shared with many other rural households in Cambodia.

Interestingly, the MOPS fieldwork—which asked specific questions about shocks faced by each household—suggests no significant difference in the incidence of shocks amongst poor and rich groups. This implies that while the majority of rural households may face a similar (and rather high) risk profile, it is the ability of richer households to cope with such shocks without needing to resort to the sale of key productive assets or other desperate survival strategies that distinguishes them from the poor, rather than the lower probability of suffering such shocks in the first place.

