



Consumption Poverty in Sri Lanka 1999 – 2002

An updated analysis of
household survey data

—

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Dilani Gunewardena

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Abbreviations and Accronyms

ADB	-	Asian Development Bank
CBN	-	Cost of Basic Needs
CCPI	-	Colombo Consumer Price Index
CEPA	-	Centre for Poverty Analysis
DCS	-	Department of Census and Statistics
FEI	-	Food Energy Intake
FGT	-	Foster, Greer, Thorbecke measures of poverty
HCI	-	Headcount Index
HIES	-	Household Income and Expenditure Survey
LFSES	-	Labour Force and Socio-Economic Survey
PG	-	Poverty Gap Index
PG2	-	Squared Poverty Gap Index
SLCPI	-	Sri Lanka Consumer Price Index
WB	-	World Bank

Executive Summary

This study complements existing poverty information in Sri Lanka by presenting a comprehensive poverty profile that examines bi-variate relationships between poverty and its covariates over a 17 year period from 1985 to 2002 using comparable data and consistent measures of poverty. The poverty profile includes poverty measures by location characteristics, such as sector, district and province, and by demographic, human capital and labour market characteristics of the household head, such as gender, educational attainment, employment status, industry, occupation, ethnicity and religion and composition of household income, including the distribution of welfare benefits, disability payments and remittances.

The study also decomposes changes in poverty in Sri Lanka over time into their growth and redistribution components, at the national, sectoral, provincial and district level and provides estimates of relative poverty changes during this period, based on several scenarios for a relative poverty line.

The data used is from the 2002, 1995/96, 1990/91 Household Income and Expenditure Surveys (HIES) and the 1985/86 Labour Force and Socio-economic Survey (LFSES).

The analysis shows that poverty in Sri Lanka has declined over the last 20 years, but that the decline has neither been large, nor steady. In fact, a relative definition of poverty based on a value close to the absolute value of the poverty line in 1995/96 would indicate that poverty has risen. The only sustained decline observed was in urban areas, particularly in the relatively affluent Western province, and within this province, in the Colombo district.

The relative regional distribution of poverty *at the end of the 17 year period* appears to have changed little from its initial picture; the Western province has the lowest poverty, the next cluster of provinces with moderate poverty comprised the Central, North Central and North Western provinces, and the highest poverty was observed in the Southern, Sabaragamuwa and Uva provinces. However, during this period, striking reductions in poverty were observed in the North Central province and Southern province.

Trends in absolute numbers and contribution to poverty moved parallel to trends in poverty incidence, with the situation in the least poor province, Western province, improving, and the situation in the poorest province, Uva province, deteriorating. At the beginning of the period, one in five persons in the former, and one in 10 persons in the latter, was poor. By the end of the period, these numbers had converged with a 15% contribution to poverty of the more populous Western province, and a 12% contribution to poverty of the sparsely populated Uva province.

Similarly, trends in poverty incidence and contribution to poverty moved parallel among all three measures of poverty. Thus, the depth and severity of poverty are generally greatest where the incidence of poverty is highest.

Decomposition of poverty changes highlighted the importance of both growth and redistribution, depending on the period under consideration. Decompositions at the disaggregated level indicated that adverse redistribution, especially in the last period, occurred not simply between districts, but also within districts. Adverse redistribution and low consumption growth led to increases in the depth and severity of poverty, indicating that the inequality experienced in the last period was not limited to the upper part of the distribution but had an effect on the poor.

Simulation exercises with different growth rates indicated the potential of growth to reduce poverty reduction. However, the high inequality experienced in the last period (1995/96-2002) indicated that the predictive power of these simulations is limited in the face of adverse redistribution, especially around and below the poverty line.

Occupational and income profiles of the poor indicated that poverty was associated more strongly with households whose head was engaged in agriculture, and least associated with households with only non-agricultural sources of income. Trends in poverty over the 17 year period indicate that the least decline in poverty was experienced by households with only agricultural income or a combination of agricultural and wage income.

The situation of female headed households, and households headed by those with low or moderate educational attainment has also worsened over the period, while poverty rates disaggregated by ethnicity and race have not changed very much. The latter may be due to the fact that the analysis is conducted only for the seven districts outside the North Eastern province.

A 'quick and dirty' simulation exercise with relative poverty lines suggests that an appropriate relative poverty line for Sri Lanka is that of 75% of median income. This was close to the value of the absolute poverty line in 1995/96. The exercise also demonstrated that relative poverty lines will always overstate the extent of poverty (relative to absolute poverty) during periods of rising (overall) living standards and will always understate the extent of poverty during periods of falling living standards. Thus, they should be used in conjunction with, rather than instead of, absolute poverty lines.

While the lesson from the regional patterns in poverty reduction appears to be that economic growth is essential for poverty to decline (as was the case in the Western province), growth will need to occur in the outlying provinces and in the agricultural sector in order for it to have an impact on poverty. Alternatively, sufficient alternatives away from agriculture need to be developed in order to enable the vast majority of the rural poor to escape poverty, especially in periods of low growth. Analyses of the distribution of welfare benefits, disability and relief payments and remittances indicated that the role of transfers - and by inference, of public and private redistribution mechanisms - in reducing poverty is limited.

ශ්‍රී ලංකාවේ පරිභෝජන දර්ශනාව: 1985-2002
ගෘහ කුටුම්භ සමීක්ෂණ දත්ත පිළිබඳ යාවත්කාලීන විශ්ලේෂණයක්
විධායක සාරාංශය

මෙම අධ්‍යයනය, සැසඳිය හැකි දත්ත සහ දර්ශනාව පිළිබඳ සංගත මනුෂී භාවිතා කරමින්, 1985 සිට 2002 දක්වා වූ 17 අවුරුදු කාලය සඳහා, දර්ශනාව සහ එහි සහ-විචලකයන් අතර පවතින ද්වි-විචලන සබඳතාව විමසන සවිස්තරාත්මක දර්ශනා පැතිකඩක් ඉදිරිපත් කිරීම මගින් ශ්‍රී ලංකාවේ දැනට පවතින දර්ශනා තොරතුරු අනුපුරාණය කරනු ලබයි. අංශය, දිස්ත්‍රික්කය හා පළාත ආදී වශයෙන් වන පිහිටීම පිළිබඳ ලක්ෂණ ද, ස්ත්‍රී පුරුෂ භාවය, අධ්‍යාපන මට්ටම, සේවක නියුක්ති තත්වය, කර්මාන්තය, ජීවනෝපාය, ජනවර්ගය සහ ආගම යනාදී ගෘහ මූලිකයන් ප්‍රජා ලක්ෂණ, මානව ප්‍රාග්ධනය සහ ශ්‍රම වෙළඳ පොළ ලක්ෂණ ද සුභසාධන ප්‍රතිලාභ බෙදීයාම, ආධාධිතයන් සඳහා ගෙවීම් සහ සංක්‍රමණික ප්‍රේෂණ ඇතුළු ගෘහස්ථ ආදායම් සංයුතිය වැනි අංශ අනුව වන දර්ශනා මනුෂී මෙම දර්ශනා පැතිකඩෙහි ඇතුළත් ය.

මෙම අධ්‍යයනය, ජාතික, ආංශික, පළාත් සහ දිස්ත්‍රික් මට්ටමෙන් දර්ශනාව වර්ධනය හා ප්‍රතිව්‍යාප්ති සංඝටකවලට, කාලයත් සමග ශ්‍රී ලංකාවේ දර්ශනාව වෙනස් වූ ආකාරය බලපාන ආකාරය ද සාපේක්ෂ දර්ශනා රටබාවක් සම්පාදනය සඳහා, අපේක්ෂා කළ හැකි විවිධ සිදුවීම් මාලාවන් පදනම් කොට ගෙන, මෙම කාලය තුළ ඇති වූ සාපේක්ෂ දර්ශනා වෙනස්වීම් පිළිබඳ ඇස්තමේන්තු ද ඉදිරිපත් කරයි.

2002, 1995/96, 1990/91 යන කාල පරිච්ඡේදවල පවත්වන ලද ගෘහස්ථ ආදායම් සහ විශදම් සමීක්ෂණ සහ 1985/86 කාල පරිච්ඡේදයේ පවත්වන ලද ශ්‍රම බලකාය සහ සමාජ ආර්ථික සමීක්ෂණ මගින් ලබා ගත් දත්ත මෙම අධ්‍යයනය සඳහා උපයෝගී කොටගෙන ඇත.

ශ්‍රී ලංකාවේ දර්ශනාව ඉකුත් විසි වසර තුළ අඩු වී ඇතත් එම අඩු වීම විශාල නොවූ අතර එය ඒකාකාර ලෙස සිදුවී නැති බව ද මෙම විශ්ලේෂණය මගින් පෙන්වා දෙයි. උදාහරණයක් ලෙස 1995/96 කාලයේ දර්ශනා රටබාවේ නිරපේක්ෂ අගයට ආසන්න අගයක් පදනම් කර ගනිමින් දිළිඳුකම පිළිබඳ සාපේක්ෂ නිර්වචනයක් සලකා බැලුවහොත්, දිළිඳුකම වැඩි වී ඇති බව පෙන්වුම් කරයි. එකම අඩුණ්ඩ අඩුවීම නිරීක්ෂණය කළ හැක්කේ සාපේක්ෂ වශයෙන් සමෘද්ධිමත් ලෙස සැලකෙන බස්නාහිර පළාත විශේෂ කොට ගත් නාගරික පළාත්වල ය. බස්නාහිර පළාත තුළ වුව ද විශේෂයෙන්ම කොළඹ දිස්ත්‍රික්කයෙහි ය.

අවුරුදු 17 කාලය අවසානයේ දී දර්ශනාවෙහි සාපේක්ෂ කලාපීය ව්‍යාප්තිය ආරම්භක අවධියෙහි පැවති තත්වයට වඩා වෙනස් වී ඇත්තේ මඳ වශයෙනි. දිළිඳුකම අඩුම මට්ටම පවතින්නේ බස්නාහිර පළාතෙහි ය. ඊළඟට මධ්‍යම මට්ටමක දිළිඳුකම පවතින පළාත් සමන්විත වන්නේ මධ්‍යම, උතුරු මැද සහ වයඹ පළාත්වලිනි. වැඩිම මට්ටමක දිළිඳුකම පවතින පළාත් නම් දකුණු, සබරගමු හා ඌව පළාත් ය. කෙසේ වුව ද, මෙම කාලය තුළ උතුරු මැද පළාතේ සහ දකුණු පළාතේ කැපී පෙනෙන ලෙස දිළිඳුකම අඩු වී ඇති බව නිරීක්ෂණය විය.

දර්ශනා ආපාතවල ප්‍රවණතාවලට සමාන්තරව, දර්ශනාවට දායකවීම සහ දර්ශනාව පිළිබඳ නිරපේක්ෂ සංඛ්‍යාවල ප්‍රවණතා, ගමන් ගෙන ඇත්තේ දර්ශනාව අඩුම පළාතවන බස්නාහිර පළාතේ තත්වය දියුණු වෙමින් ද, දර්ශනාව වැඩිම පළාත වන ඌව පළාතේ තත්වය පිරිහෙමින් ද පවතින තත්වයක දී ය. කාලවිච්ඡේදය ආරම්භයේ දී බස්නාහිර පළාතේ 05 දෙනෙකුට එක්කෙනෙක් ද, ඌව පළාතේ 10 දෙනෙකුට එක්කෙනෙක් ද, දිළිඳු විය. කාලවිච්ඡේදය අවසානයේ මෙම සංඛ්‍යා පෙර තිබූ තත්වයට පත් වී ඇත්තේ වැඩි ජනගහනයක් ඇති බස්නාහිර පළාත දිළිඳුකමට 15% කින් දායක වෙමින් ද, අඩු ජනගහනයක් ඇති ඌව පළාත දිළිඳුකමට 12% කින් ද දායක වෙමින් ය.

එලෙසම දර්ශනාව මනින මනුෂී තුනෙන්, දර්ශනා ආපාතයේ ප්‍රවණතා සහ දර්ශනාවට දායකවීම සමාන්තරව ගමන් කර ඇත. ඒ අනුව දර්ශනා ආපාතය ඉහළම අගයක් වන කලිනි දර්ශනාව පිළිබඳ ගැඹුර සහ තීව්‍රතාවය ද සාමාන්‍යයෙන් ඉතා ඉහළ අගයක් ගනී.

දර්ශනා වෙනස්වීම් විසන්දනාගත කිරීමේ දී, සලකා බලන කාලය අනුව, වර්ධනය හා ප්‍රතිව්‍යාප්තියෙහි වැදගත්කම ඉස්මතු වේ. විශේෂයෙන්ම අවසාන කාලපරිච්ඡේදයේ දී, අභිතකර ප්‍රතිව්‍යාප්තිය දිස්ත්‍රික්ක තුළ පමණක් නොව දිස්ත්‍රික්ක අතර ද සිදු වූ බව, කොටස්වලට බෙදා විසන්දනාගත කිරීම තුළින් පෙනේ. අභිතකර ප්‍රතිව්‍යාප්තිය සහ අඩු පරිභෝජන වර්ධනය දිළිඳුකමේ ගැඹුර සහ තීව්‍රතාවය වැඩි කිරීමට හේතු විය. එමගින් නිර්දේශිත වූ කාරණය නම්, අවසන් කාලවිච්ඡේදයේ දී අත්දැකීමට ලැබුණ අසමානතාවය, ව්‍යාප්තියෙහි ඉහළ කොටසට පමණක් සීමා නොවූ බව සහ එය දිළිඳු ජනයා කෙරෙහි ද බල පෑ බව යි.

විවිධ වර්ධන අනුපාත උපයෝගී කොට ගෙන කළ සමානාකාරී සැදීමේ අභ්‍යාස, දිළිඳුකම අඩු කිරීමේ වේගය අඩු කිරීමට ආර්ථික වර්ධනය සතු විභවතාවය පෙන්වා දුනි. විශේෂයෙන්ම, දිළිඳු රේඛාව අවට සහ ඊට පහළ මට්ටම්වල දී, මෙම සමානාකාරීවල පුරෝකථන බලය අතිතකර ප්‍රතිව්‍යාප්තිය අධ්‍යයන සීමාවන බව, අවසන් කාලයේ දී (1995/96 - 2002) දැක්වීමට ලැබුණු ඉහළ මට්ටමේ අසමානතා පෙන්වා දුන්නේ ය.

කෘෂිකර්මයෙහි නියුතු ප්‍රධානීන් සිටින ගෘහස්ත ආශ්‍රිතව වැඩි වශයෙන් දිළිඳුකම පවතින බව ද, කෘෂිකර්මය නොවන ආදායම් ප්‍රභවයන් පමණක් සතු වන ගෘහස්ථ ආශ්‍රිතව අඩුම මට්ටමක දිළිඳුකම පවතින බව ද, දිළිඳු ජනතාවගේ ජීවනෝපාය සහ ආදායම් පැතිකඩ දැක්වීය. කෘෂිකර්ම ආදායම පමණක් හෝ කෘෂිකර්මය සහ වේතන එකතුවකින් ආදායම ලබා ගන්නා ගෘහස්ථවල දිළිඳුකම අඩු වීම අඩුම මට්ටමෙහි පැවති බව ඉකුත් 17 වසර තුළ දිළිඳුකම පිළිබඳ ප්‍රවණතා පෙන්වා දෙයි.

ජනවාර්ගිකත්වය සහ ජාතිය අනුව කොටස්වලට බෙදා දැරුණා අනුපාත සැලකිය යුතු වෙනසක් නොදක්වන අතර කාන්තාවන් නායකත්වය දරන ගෘහස්ථ සහ අඩු හා මධ්‍යස්ථ අධ්‍යාපනය ලද අය නායකත්වය දරන ගෘහස්ථවල තත්ත්වය මෙම කාලය තුළ නරක අතට හැරී ඇත. ජනවාර්ගිකත්වය සහ ජාතිය අනුව කොටස්වලට බෙදා දැරුණා අනුපාතය සැලකිය යුතු වෙනසක් නොදක්වන්නේ උතුරු-නැගෙනහිර පළාත් හැර අනෙක් දිස්ත්‍රික්ක හත තුළ පමණක් සමීක්ෂණය පවත්වා තිබීම නිසා විය හැක.

ආදායම් මධ්‍යස්ථයෙන් සියයට 75 ශ්‍රී ලංකාවට යෝග්‍ය සාපේක්ෂ දර්ශක රේඛාව හැටියට සැලකිය හැකි බව සාපේක්ෂ දර්ශක රේඛා යොදා ගෙන සිදු කළ 'ක්ෂණික හා කිලිටි' (quick and dirty) සමානාකාරී සැදීමේ අභ්‍යාසය පෙන්වා දෙයි. මෙය 1995/96 කාලයේ දී පැවති නිරපේක්ෂ දර්ශක රේඛාවෙහි අගයට ආසන්න ය. ජීවන තත්ත්වය (සමස්ත) වශයෙන් වර්ධනය වන කාලවල, සාපේක්ෂ දර්ශක රේඛා සැම විටම, දර්ශකවලට මට්ටම පවතින සත්‍ය තත්ත්වයට වඩා වැඩි ලෙස දක්වන අතර, ජීවන තත්ත්වය පහත වැටෙන කාලවලදී, එම රේඛාවන් සැම විටම, දර්ශකවලට මට්ටම පවතින සත්‍ය තත්ත්වයට වඩා වැඩි ලෙස දක්වන අතර, ජීවන තත්ත්වය පහත වැටෙන කාලවලදී, එම රේඛාවන් සැම විටම, දර්ශකවලට මට්ටම පවතින සත්‍ය තත්ත්වයට වඩා අඩුවෙන් දක්වන බව, අභ්‍යාසය පැහැදිලි කළේ ය. එබැවින් එවා නිරපේක්ෂ දර්ශක රේඛා වෙනුවට නොව, නිරපේක්ෂ දර්ශක රේඛා සමඟ භාවිතා කළ යුතුය.

දර්ශකවල අඩු කිරීමට ආර්ථික වර්ධනය (බස්නාහිර පළාතේ දක්නට ලැබෙන පරිදි) අවශ්‍ය බව දර්ශක අඩු කිරීමේ කලාපීය රටාවන්ගෙන් උගත යුතු පාඩම වන අතර, දර්ශකව කෙරෙහි බලපෑමක් ඇති කිරීමට, යාබද දිස්ත්‍රික්කවල සහ කෘෂිකර්ම අංශයේ වර්ධනයක් සිදු විය යුතු වේ. එසේ නැතහොත්, විශේෂයෙන්ම අඩු වර්ධනයක් ඇති කාලවලදී, ග්‍රාමීය දිළිඳු ජනතාව අතුරින් අති බහුතරයකට දිළිඳුකමෙන් මිදීමට කෘෂිකර්මයෙන් බාහිරව ප්‍රමාණවත් විකල්පයන් වර්ධනය කළ යුතු ය. ශුභ සාධන ප්‍රතිලාභ බෙදීම ද, ආධායිත අය සඳහා ගෙවීම්, සහන ගෙවීම් සහ ප්‍රේෂණ විශ්ලේෂණය පැහැදිලි කළේ දර්ශකව අඩු කිරීමෙහිලා ආදායම එක් අංශයකින් තවත් අංශයකට ලැබෙන්නට සැලැස්වීමෙහි, එනම් පෞද්ගලික හා පොදු ප්‍රතිව්‍යාප්තියෙහි කාර්යභාරය සීමිත බව ය.

நிறைவேற்றுச் சாராம்சம்

வறுமையின் ஒப்பிடக்கூடிய தரவுகளையும், முரண்படாத நடவடிக்கைகளையும் பயன்படுத்தி 1985 முதல் 2002 வரையிலான 17 வருட காலத்தின் போது வறுமைக்கும், அதன் ஓத்த மாறிலிகளுக்கும் இடையிலான இரட்டை மாறிலி உறவுகளைப் பரிசீலிக்கின்ற விரிவானதொரு வறுமைப் புறவரையை முன்வைப்பதன் மூலம், இலங்கையில் நடைமுறையில் உள்ள வறுமைத் தகவலை இவ்வாய்வு ிர்த்தி செய்கின்றது. துறை, மாவட்டம் மற்றும் மாகாணம் போன்ற அமைவிட குணவியல்புகளினாலும், பால்நிலை, கல்விசார் பேறு, தொழில்நிலை, கைத்தொழில், தொழில், இனத்துவம் மற்றும் சமயம் போன்ற குடித்தனத் தலைவரின் குடித்தொகையியல், மனித மூலதன மற்றும் தொழில் சந்தை குணவியல்புகள் ஆகியனவற்றினாலும், சேமநலன் நன்மைகளின் பங்கீடு, அங்கவீனக் கொடுப்பனவுகள் மற்றும் அனுப்பீடுகள் ஆகியவற்றின் பங்கீடு உட்பட குடித்தன வருமானத்தின் அடக்கம் ஆகியவற்றினாலும் வறுமை நடவடிக்கைகளை வறுமைப் புறவரை உள்ளடக்குகின்றது.

தேசிய, துறைகள், மாகாண மற்றும் மாவட்ட மட்டங்களில் தமது வளர்ச்சி மற்றும் மீள்பங்கீடு அம்சங்களினுள் காலப்போக்கில் இலங்கையில் வறுமையில் மாற்றங்களை ஆய்வு பிரித்துப்பார்ப்பதுடன், சார்புரீதியிலான வறுமைக் கோட்டொன்றுக்கான பெருமளவு காட்சித்தோற்றங்கள் மீதான அடிப்படையில், இக் காலத்தின் போது சார்புரீதியிலான வறுமை மாற்றங்களின் மதிப்பீடுகளையும் வழங்குகின்றது.

2002, 1995-96, 1990-91 குடித்தன வருமான, செலவின அளவீடுகள் மற்றும் 1985-86 உழைப்பாளர் படை, சமூக-பொருளாதார அளவீடு ஆகியவற்றிலிருந்து தரவுகள் பயன்படுத்தப்பட்டுள்ளன.

கடந்த 20 வருடங்களின் போது இலங்கையில் வறுமை வீழ்ச்சியடைந்துள்ளதாகவும், ஆனால், அந்த வீழ்ச்சி ஒன்றில் பாரியதாக, அல்லது உறுதியாக இருக்கவில்லை என பகுப்பாய்வு காட்டுகின்றது. உண்மையில், 1975-96இல் வறுமைக் கோட்டின் ிரணமான பெறுமதிக்கு கிட்டிய பெறுமதியொன்றின் மீதான அடிப்படையில் வறுமையின் சார்புரீதியிலான வரைவிலக்கணமானது வறுமை அதிகரித்துள்ளதையே காட்டுகின்றது. நகரப் பகுதிகளில், குறிப்பாக சார்புரீதியில் செழிப்பு நிலையிலான மேல் மாகாணத்தில், இம் மாகாணத்தினுள் கொழும்பு மாவட்டத்தில், நிலைத்திருக்கத்தக்க வீழ்ச்சி மட்டுமே அவதானிக்கப்பட்டது.

17 வருட காலத்தின் இறுதியில் வறுமையில் சார்புரீதியிலான பிராந்திய பங்கீடு அதன் ஆரம்பத்திலிருந்து சிறிதளவு மாற்றமடைந்துள்ளதாகத் தோன்றுகின்றது. மேல் மாகாணம் ஆகக்குறைந்த வறுமையைக் கொண்டுள்ளது. அடுத்த மிதமான வறுமையுடனான மாகாணங்களாக மத்திய, வட மத்திய மற்றும் வட மேல் மாகாணங்கள் விளங்குவதுடன், ஆகக்கூடுதலான வறுமை தென், சப்ரகமுவ மற்றும் ஊவா மாகாணங்களில் அவதானிக்கப்பட்டது. எனினும், இக் காலத்தின் போது, வட மத்திய மாகாணத்திலும், தென் மாகாணத்திலும் வறுமையின் மனதில் பதியத்தக்க குறைப்புக்கள் அவதானிக்கப்பட்டன.

ஆகக் குறைந்த வறுமையிலான மாகாணமான மேல் மாகாணத்தில் சூழ்நிலை முன்னேற்றமடைந்துள்ளது. ஆனால், மிகவும் வறுமைப்பட்ட மாகாணமான ஊவா மாகாணத்தில் சூழ்நிலை சீர்கேடைந்துள்ளதுடன், வறுமை நிகழ்வில் உள்ள போக்குகளுக்குச் சமாந்தரமாக வறுமைக்காக ிரணமான எண்ணிக்கையில் போக்குகளும், வறுமைக்கான பங்களிப்பும் நகர்ந்தன. காலத்தின் ஆரம்பத்தில் மேல் மாகாணத்தில் ஐந்து நபர்களில் ஒருவரும், ஊவா மாகாணத்தில் 10 நபர்களில் ஒருவரும் ஏழைகளாக விளங்கினார்கள். காலத்தின் முடிவின் போது, அதிக சனத்தொகையைக் கொண்ட மேல் மாகாணத்தின் வறுமைக்கு 15% பங்களிப்புடனும், அடர்த்தியற்ற சனத்தொகையைக் கொண்ட வறுமைக்கு 12% பங்களிப்புடனும் இவ்வெண்ணிக்கைகள் குறைவடைந்திருந்தன.

இதே போல, வறுமை நிகழ்வில் போக்குகளும், வறுமைக்கான பங்களிப்பும் வறுமையின் சகல மூன்று நடவடிக்கைகள் மத்தியில் சமாந்தரமாக நகர்ந்தன. ஆதலினால், பொதுவாகவே வறுமையின் ஆழமும், தீவிரத்தன்மையும் பாரியவை என்பதுடன், வறுமையின் நிகழ்வு ஆகக்கூடுதலானது.

கரிசனையின் கீழுள்ள காலத்தினைப் பொறுத்து, வளர்ச்சி மற்றும் மீள்பங்கீடு ஆகிய இரண்டினதும் முக்கியத்துவத்தை வறுமை மாற்றங்களின் சிதைவுகள் முனைவுபடுத்தின. மறுதலையிலான பிளவுகள், விசேடமாக கடைசி காலத்தில் வெறுமனே மாவட்டங்களுக்கு இடையில் மட்டுமன்றி, ஆனால் மாவட்டங்களினுள்ளும் இடம்பெற்றிருப்பதாக ஒன்று சேர்க்கப்படாத மட்டத்தில் சிதைவுகள் எடுத்துக் காட்டின. மறுதலையான மீள்பங்கீடும், குறைந்த பாவனை வளர்ச்சியும் வறுமையின் ஆழத்திலும், தீவிரத்தன்மையிலும் அதிகரிப்புக்கு இட்டுச் சென்றது. இது கடந்த காலத்தில் அனுமதிக்கப்பட்ட சமத்துவமின் மையானது பங்கீட்டின் உயரத்திலுள்ள பாகத்திற்கு மட்டுப்படுத்தப்பட்டிருக்கவில்லை, ஆனால் ஏழைகள் மீது தாக்கமொன்றைக் கொண்டிருப்பதை எடுத்துக் காட்டுகின்றது.

வேறுபட்ட வளர்ச்சி வீதங்களுடனான பாசாங்கு அப்பியாசங்கள் வறுமையைக் குறைப்பதற்கு வளர்ச்சியின் ஆற்றலளவை எடுத்துக் காட்டின. எனினும், மறுதலையான மீள்பங்கீட்டின் காரணமாக, விசேடமாக வறுமைக்கோட்டைச் சுற்றியும், கீழேயும் இப்பாசாங்குகளின் எதிர்வுகூறத்தக்க சக்தி மட்டுப்படுத்தப்பட்டுள்ளது என்பதை கடந்த காலத்தில் (1995-96 - 2002) அனுபவிக்கப்பட்ட உயர்வான சமத்துவமின்மை எடுத்துக் காட்டுகின்றது.

விவசாயத்தில் ஈடுபட்டுள்ள தலைவரைக் கொண்டுள்ள குடித்தனங்களுடன் வறுமையானது அதிகளவு வலுவுடன் இணைந்துள்ளதாகவும், விவசாயம் சாராத வருமான மூலங்களை மட்டுமே கொண்ட குடித்தனங்களுடன் ஆகக் குறைந்தளவு இணைந்துள்ளதாகவும் ஏழைகளின் தொழில்நிலை மற்றும் வருமானப் புறவரைகள் எடுத்துக் காட்டின. கடந்த 17 வருட காலத்தின் போது வறுமையின் போக்குகள் வறுமையில் ஆகக் குறைந்த வீழ்ச்சியானது விவசாய வருமானத்துடன் மட்டும் கொண்டுள்ள, அல்லது விவசாய மற்றும் வேதன வருமானம் ஆகிய இரண்டையும் கொண்டுள்ள குடித்தனங்களினால் அனுபவிக்கப்பட்டன.

இக் காலத்தின் போது பெண் தலைமையிலான குடித்தனங்களினதும், குறைந்த அல்லது மிதமான கல்விசார் பேற்றுடன் உள்ளவர்களின் தலைமையிலான குடித்தனங்களினதும் சூழ்நிலை மோசமடைந்துள்ள அதே வேளை, இனத்துவத்தினாலும், இனத்தினாலும் ஒருங்கிணைக்கப்படாத வறுமை வீதங்கள் மிகவும் அதிகளவு மாற்றமடையவில்லை.

சார்புரீதியிலான வறுமைக் கோடுகளுடன் 'விரைவானதும், கண்ணியமற்றதுமான' அப்பியாசமானது இலங்கைக்கான பொருத்தமான சார்புரீதியிலான வறுமைக் கோடொன்று 75% கொண்ட நடுநிலை வருமானமொன்றைக் சுட்டிச்சொல்கின்றது. இது 1995-96இல் ஐரணமான வறுமைக் கோட்டின் பெறுமதிக்கே கோட்டுக்கு கிட்டியதாக உள்ளது. உயர்கின்ற (முழுமையான) வாழ்க்கைத் தரங்களின் காலங்களின் போது, வறுமையின் அளவை (ஐரணமான வறுமைக்குத் சார்புரீதியான) சார்புரீதியிலான வறுமைக் கோடுகள் எப்பொழுதுமே கூட்டிக் கூறுகின்றது என்பதையும், வாழ்க்கைத் தரங்களின் வீழ்ச்சியுறும் காலங்களின் போது வறுமையின் அளவை எப்பொழுதுமே குறைத்துக் கூறுகின்றது என்பதையும் எடுத்துக் காட்டியது. ஆதலினால், ஐரணமான வறுமைக் கோடுகளுக்கு பதிலாக, ஒன்று சேர அவை பயன்படுத்தப்பட வேண்டும்.

வறுமை வீழ்ச்சியடைவதற்கு (மேல் மாகாணத்தில் விளங்குவது போன்று) பொருளாதார வளர்ச்சி அவசியமாக இருக்க வேண்டும் என வறுமைக் குறைப்பில் பிராந்திய வடிவத்தன்மைகளில் இருந்து எழும் பாடம் தோன்றுகின்ற அதே வேளை, வறுமை மீது அது தாக்கமொன்றைக் கொண்டிருக்குமுகமாக அடுத்துள்ள மாகாணங்களிலும், விவசாயத்திலும் வளர்ச்சி இடம்பெறுவது அவசியமானதாகும். மாற்றுவழியாக, விசேடமாக குறைந்த வளர்ச்சிக் காலத்தில் வறுமையிலிருந்து தப்புவதற்கு, கிராமிய ஏழைகளின் அதிக பெரும்பான்மையினரை இயலச் செய்வதற்காக விவசாயத்திலிருந்து விலகி போதியளவு மாற்றுவழிகளை விருத்தி செய்வது அவசியமானதாகும். வறுமையைக் குறைப்பதில் அரசாங்க மற்றும் தனியார் மீள்பங்கீடு பொறி முறைகளின் இடமாற்றங்களின் வகிபங்கும், அவற்றின் அனுமானமும் மட்டுப்படுத்தப்பட்டுள்ளன என்பதையே சேமநலன் நன்மைகளின் பங்கீடு, அங்கவீனம் மற்றும் நிவாரணக் கொடுப்பனவுகள் மற்றும் அனுப்பீடுகள் ஆகியன பற்றிய பகுப்பாய்வு எடுத்துக் காட்டுகின்றது.

1. Introduction

Measurement of consumption poverty in Sri Lanka has made great strides forward in recent years, including the introduction of an official poverty line, derived according to best practice principles, by the Department of Census and Statistics (DCS) in June 2004 (DCS 2004a).

Following the computation of the official poverty line, the DCS has published several poverty statistics for a variety of disaggregated categories.¹ These include:

- National, sector-, district- and province-level estimates of the Headcount Index of poverty for the 1990-2002 period (DCS 2004a).
- Sector-level estimates of other indices of poverty (Poverty Gap and Squared Poverty Gap) for the 1990-2002 period (DCS 2004b).
- Estimates of the Head count Index and Poverty Gap ratio of poverty for male- and female-headed households, national, by sector, and district for 1990/91 and 2002 (DCS 2004b, DCS 2005a).
- Estimates of the percentage of households below the poverty line by province, district and ethnicity for 2002 (DCS 2004b).
- Estimates of the percentage of households below the poverty line by employment/livelihood status of the household head, by industry of the principal income earner, and by educational attainment of the head of household for all three sectors for 2002 (DCS 2004b).
- Estimates of poverty (percentage of population, and number of poor people) estimated using small area data techniques (poverty maps) at the District Secretariat Division (DSD) (DCS 2005b).

In addition, the most recent World Bank Poverty Assessment (World Bank 2007) conducted a comprehensive analysis of poverty and generated many poverty and inequality statistics, including among them growth and redistribution decompositions of poverty changes at the national level, and multivariate determinants of poverty.

The purpose of this study on disaggregated poverty measures is to complement existing poverty data and analysis, specifically:

- to supplement existing poverty statistics with a comprehensive poverty profile that examines bi-variate relationships between poverty and its covariates for Sri Lanka for the 17 year period from 1985 to 2002 using comparable data and consistent measures of poverty².
- to provide an analysis of the relative contributions of growth and redistribution in reducing poverty in Sri Lanka over time, nationally, and at the sectoral, provincial and district level.
- to conduct simulations of poverty reduction for several scenarios of distribution-neutral growth.
- to examine several possibilities for a relative poverty line for Sri Lanka, based on the relative position of the value of the (absolute) official poverty line in 2002.

The new information generated and reported here includes:

- A poverty line for 1985/86, derived by using the method recommended by DCS (2004a).

¹ A summary of these statistics is available in DCS (2006).

² The analysis excludes the Northern and Eastern provinces as the HIES data do not contain data from these regions. They have also been excluded from the 1985/86 data for purposes of comparability.

- A complete poverty profile for 1985/86 based on LFSES 1985/86 data using the newly derived poverty line (which is based on the official poverty line).
- Complete poverty profiles for 1990/91, 1995/96 and 2002 using HIES 2002, 1995/96, 1990/91 which include poverty measures by location characteristics, such as sector, district and province, and by demographic, human capital and labour market characteristics of the household head, such as gender, educational attainment, employment status, industry, occupation, ethnicity and religion for all three Foster-Greer-Thorbecke (FGT) measures of poverty.
- Simulations of poverty reduction for several (distribution-neutral) growth scenarios.
- Growth and inequality decompositions of poverty changes for the entire 1985-2002 period and for sub-periods within this time, at the national, sectoral, provincial and district level.
- A complete profile of the poor by the composition of household income, including the distribution of welfare benefits, disability payments and remittances.
- Relative poverty line simulations.

The analysis has a major limitation in that the analysis of poverty in Sri Lanka is restricted to the seven provinces outside the North and the East. Given the conflict situation in these districts, poverty changes between 1985-2002 are likely to have been adverse. While several recent studies have attempted to get a picture of the poverty situation in these areas with smaller surveys and other available information on a few districts in this region (World Bank 2007, Central Bank 2005), this study is unable to do so as it relies entirely on HIES data.³

The study is organised as follows. The next section describes the poverty measurement methodology used in this study which is also the official methodology adopted by the Department of Census and Statistics. This method is then applied in the sections that follow. In section 3, a spatial-sectoral profile of poverty for 2002 is constructed and compared to data from 1985-6, 1990-1 and 1995-6. Section 4 first simulates poverty reduction possibilities based on several distribution-neutral growth scenarios at the national level. Actual changes are then decomposed over the 1985-2002 period into their growth and redistribution components, at the national and regionally disaggregated level. Section 5 presents a poverty profile by demographic and labour market characteristics of the household head, while section 6 presents a profile of the poor by composition of household income. Section 7 provides an estimate of relative poverty changes during this period, based on several scenarios for a relative poverty line. The last section summarises the findings and suggests avenues for future work.⁴

³ See footnote 2.

⁴ Stata version 9 was used to conduct the data analysis throughout the study.

2. Measuring Poverty in Sri Lanka

2.1 Choice of poverty indicator, unit of analysis and equivalence scale

Absolute poverty exists when one or more persons fall short of a level of wellbeing deemed to constitute a reasonable minimum, in some absolute sense (Lipton and Ravallion 1995). Wellbeing can be defined in terms of access to basic needs, or enjoying a certain quality of life, or in *being* well, that is, having the capability to function within a society.

While the limitations of unidimensional measures of poverty are well known, it is nevertheless convenient and simple to define poverty in terms of a single indicator of economic resources.⁵ If we consider poverty as a measure of disadvantage in living standards or lack of access to basic needs, the most appropriate choice of poverty indicator is current real total consumption, i.e. expenditure on consumption plus home produced goods and services (Atkinson 1991, Ravallion 1994, Lipton and Ravallion 1995). Thus, we use data on (per capita) total household consumption as measured by the household surveys of the Department of Census and Statistics, which includes over 400 items of household consumption.⁶

The equivalent scale we use is *per capita* consumption, which is a special case of the general definition:

$$\text{equivalent consumption} = \text{total consumption} / n^s$$

where n is the household size and s is equal to one.⁷

Note that in terms of indicator, unit of analysis and equivalence scale, this profile is in line with current DCS measures of poverty and poverty profiles used in World Bank Poverty Assessments (World Bank 2007, World Bank 2002, Gunewardena 2000, World Bank 1995, Datt and Gunewardena 1997).

⁵ If the information generated by this approach is considered inadequate, it can always be supplemented with other indicators that influence wellbeing, such as access to education and health, disabilities that make it difficult to translate a given bundle of consumption into capabilities, etc.

⁶ The data is from the Household Income and Expenditure Surveys (HIES) for 2002, 1995/96 and 1990/91, and Labour Force and Socioeconomic survey for 1985/86 (LFSES). Food consumption is reported calendar-style, for a week, while non-food consumption is reported for the past month, six months or twelve months. Consumption on all items is then converted to monthly consumption. Reported values are of the amount consumed, which includes purchased goods and services, as well as home-produced goods and services. The household is defined as "one or more persons living together and having common arrangements for food and other essentials of living" (LFSES 1985/86 Final Report). Boarders' and domestic workers' non-food consumption is not included, although their food consumption may be included if they are present for meals.

⁷ Deaton (1997:150) points out that the equivalent scale literature is still far from providing satisfactory answers to the theoretical and methodological problems involved, and that "the use of household [per capita expenditure] PCE assigned to individuals is still best practice." Another problem with using *per capita* expenditure is that it ignores economies of scale. Studies have shown that the effect of ignoring economies of scale is not negligible (Lanjouw and Ravallion 1995, Deaton and Paxson 1996). However, there are similar problems with measuring economies of scale (Deaton 1997:262-270). DCS (2004a) reports that "analysis on equivalence scales and economies of scale showed that there is no marked difference between (1) per capita and (2) per adult equivalent, in terms of Head Count Index."

2.2 Poverty line

The poverty line used is the official poverty line of Rs.1,423 in 2002.⁸ This poverty line is constructed following the *cost of basic needs (CBN) method* (Ravallion 1994).⁹

In this method, a food poverty line is first derived using the cost of a food bundle that satisfies the food-energy requirement, at given tastes. The food energy requirement that provides the nutritional anchor for the official poverty line is 2030kcal per person per day (DCS 2004a).

The food poverty line is derived as the cost per calorie multiplied by the monthly nutritional requirement (cost per calorie \times 2030 \times 30kcal). This is done by obtaining aggregate food expenditures and calorie intakes of the households in the second to fourth deciles of the population ranked by real per capita total consumption expenditure. The value of the food poverty line thus obtained from unit data from HIES 2002 is Rs.973 per person per month (DCS 2004a).

Typically, a lower-bound estimate and upper-bound estimate of the poverty line are then derived. The definition of the lower bound estimate of the poverty line is that it is equal to the food poverty line plus the average non-food consumption of those who can *afford* to meet their food energy needs. The latter component can alternatively be specifically defined as the average per capita non-food expenditure of households whose per capita *total consumption expenditure* is close to the *food poverty line*. Intuitively, any non-food expenditure of a household whose total consumption is close to the food poverty line has to occur by cutting down on essential food expenditure – one can reasonably interpret the value of any non-food consumption of such households as being 'essential'. DCS calculates the lower bound of the total poverty line at Rs.1,1267 based on the addition to the food poverty line of the median per-capita non-food expenditure of households whose real per-capita total consumption expenditure is within an interval of plus or minus 10% around the food poverty line (DCS 2004a:4-5).

The upper bound estimate is defined as the poverty line at which a person typically attains their food requirement (Ravallion 1994:122-3). The non-food component of the upper bound estimate is then the average non-food expenditure of households whose *food* expenditure is close to the *food poverty line*. DCS calculates the upper bound of the total poverty line at Rs.1,579 based on the addition to food poverty line of the median non-food expenditure of households whose real per-capita *food* expenditure is within an interval of plus or minus 10% around the food poverty line (*ibid*:4-5).

The official poverty line is then calculated as the simple arithmetic mean of the two estimates, Rs.1,423. This does away with the need for using two poverty lines, while grounding the poverty line firmly between the lower and upper bound estimates.

⁸ DCS (2004a) provides a detailed description of how the official poverty line was derived. This section draws on that description.

⁹ The cost of basic needs (CBN) method used here in deriving the poverty line is superior to the alternatives, the direct calorie intake (DCI) method and the food energy intake (FEI) methods. The DCI method has an advantage in that it is a 'real' measure of consumption. If one uses this method, one does not have to calculate price indices to make comparisons over time and space. Its main disadvantage is that it ignores the fact that food consumption is only one aspect of wellbeing, that poverty denotes a lack of access to basic needs other than food, such as clothing, housing, education and health. The FEI method is superior to the DCI method because it includes consumption on all items, not merely food. However, it is inferior to the CBN method in the manner in which it translates food energy requirements into consumption expenditure. The problem with the FEI method is that while it allows poverty lines to differ according to activity levels and relative prices, it also allows them to differ according to other factors which may not be relevant to poverty comparisons (Ravallion and Bidani 1994).

Both the official poverty line and previously estimated poverty lines used in World Bank Assessments (World Bank 2007, World Bank 2002, Gunewardena 2000, World Bank 1995, Datt and Gunewardena 1997) are based on the cost of basic needs method (CBN). The difference between the official estimates of the national poverty line and previous estimates of the national poverty line lie in, a) the caloric norm used (other measures use 2500kcal per adult equivalent per day), and b) the non-food component of the lower bound poverty line in previous studies was obtained parametrically as the food share at the poverty line, with the regression based on the reference group of the lowest 4 deciles and the upper bound was calculated as simply being 20% higher (Datt and Gunewardena 1997, Gunewardena 2000).

2.3 Adjusting for price differences across districts and time

2.3.1 Adjusting the poverty line across time

The official national poverty line is derived by DCS (2004a) for 2002 using HIES household expenditure data from January to December 2002. The DCS recommends that in order to obtain official poverty lines at current prices for previous years this line is deflated using the Colombo Consumer Price Index (CCPI) (DCS 2004a).¹⁰ We use the poverty lines provided by DCS for 1990/1 and 1995/6 which are derived by using the CCPI.

2.3.2 Adjusting the poverty line across districts

Spatial price indices are computed by the DCS using the Laspeyres Method, using implicit prices (unit values) from the survey data (DCS 2004a). These were obtained from a sub-sample of the data - the second to fourth deciles ranked by nominal per capita consumption. They are constructed at the district level (as opposed to a combination of regions and sectors used by Datt and Gunewardena (1997) and Gunewardena (2000) in previous estimates). The DCS regional poverty lines derived following this method are used in this study to construct spatial price indices to standardise consumption across the country.¹¹

2.3.3 A poverty line for 1985/86

This report uses the poverty lines provided by DCS (2004a) for 2002, 1990/91 and 1995/96. However, DCS does not provide a poverty line for 1985/86. Thus the poverty line for 2002 was deflated using the CCPI to obtain a figure of Rs.261.45 as the poverty line for 1985/86 in current prices.¹² This is 8% higher than the lower bound estimate of Rs.242.06 (and 12% lower than the corresponding upper bound estimate) used in previous profiles (World Bank 2002, Gunewardena 2000, World Bank 1995, Datt and Gunewardena 1997).

¹⁰ Official poverty lines for years after 2002 are obtained by updating with the Sri Lanka Consumer Price Index (SLCPI).

¹¹ E.g. The spatial price index for Colombo is the poverty line for Colombo district divided by the national poverty line. Nominal consumption figures are then converted to real (i.e. spatially comparable) consumption by dividing by the relevant spatial price index.

¹² This follows the recommendation in DCS 2004a.

Table 2.1: District and national poverty lines from 1985-2002 in current prices (Rs.)

District	Year				
	2002	1995-96	1990-91	1985-86	
				Rural	Urban
Colombo	1537	908	518	261.19	276.61
Gampaha	1508	875	489	261.19	276.61
Kalutara	1523	866	494	261.19	276.61
Kandy	1451	850	485	254.13	268.25
Matale	1395	816	466	254.13	268.25
Nuwara Eliya	1437	841	494	254.13	268.25
Galle	1466	833	489	255.44	264.33
Matara	1395	816	470	255.44	264.33
Hambantota	1338	791	470	255.44	264.33
Kurunegala	1352	791	456	259.62	267.72
Puttalam	1423	841	461	259.62	267.72
Anuradapura	1380	816	456	259.62	267.72
Polonnaruwa	1366	783	475	259.62	267.72
Badulla	1409	850	485	261.71	260.40
Monaragala	1366	791	480	261.71	260.40
Ratnapura	1451	833	494	261.71	260.40
Kegalle	1437	858	466	261.71	260.40
National	1423	833	475	261.45	261.45

Source: For 1990-2002, DCS 2004a, calculated using HIES 1990/91, 1995/96 and 2002 and CCPI For 1985/86, calculated by the author using LFSES 1985/86 and CCPI

2.4 Poverty measures

A poverty profile typically answers the question "If an individual exhibits a particular characteristic (e.g. of educational achievement) or lives in a particular area (sector, province, district) what is the likelihood of this individual being poor?" In other words, what proportion of individuals (e.g.) with no schooling, or living in the rural sector, are poor? This measure is known as the *Headcount Index*. A shortcoming of this measure is that it ignores both the depth of poverty and inequality among the poor. The *Poverty Gap* and *Squared Poverty Gap* indices remedy this. Together, these indices form part of a larger family of measures known as the FGT measures of poverty (Foster, Greer and Thorbecke 1984).

The formula to compute an FGT measure of poverty is:

$$P_{\alpha} = (1/n) \sum_{x < z} [(z - x_i)/z]^{\alpha} \quad ; \quad \alpha \geq 0$$

where x is per capita consumption expenditure, z is the poverty line, n is the size of the population, P is the poverty measure which is (a) the Headcount Index when α is zero, (b) the Poverty Gap Index when α is 1 and (c) the Squared Poverty Gap Index when α is 2.¹³

All the analysis in this study uses these three FGT measures of poverty. While the Headcount Index is commonly used and has an intuitively appealing interpretation, the Poverty Gap Index, and the Squared Poverty Gap Index are less intuitively appealing. It

¹³ The Squared Poverty Gap measure satisfies Sen's (1976) transfer axiom (transfers from a poor person to someone who is poorer will reduce measured poverty).

may help to think of the poverty gap in terms of its cousin, the Income Gap Ratio, which is interpreted as the gap in consumption (distance between own consumption and the poverty line) of the average poor person. The difference between the Income Gap Ratio and the Poverty Gap Index is simply in the denominator, and the PG index can be interpreted as an average consumption shortfall, where shortfalls in consumption for the non-poor are considered to be zero (Table 2.2)¹⁴ Similarly, the Squared Poverty Gap can be interpreted as a weighted average of the consumption shortfall, where weights for poorer people (larger shortfalls) are larger.

Table 2.2: Definitions of poverty measures

P_0 Headcount Index (H) The incidence of poverty	The percentage of individuals in a given population whose standard of living lies below the poverty line
P_1 Poverty Gap index (PG) The depth of poverty	The average shortfall between an individual's level of consumption and the poverty line, where the shortfall for all individuals whose consumption falls above the poverty line is zero.
P_2 Squared Poverty Gap index (PG2) The severity of poverty	As for the poverty gap, but by squaring the shortfall between an individual's level of consumption and the poverty line, it places greater weight on poorer individuals.

¹⁴ It can be easily shown that the Poverty Gap (PG) Index is the multiple of the Headcount (H) Index and the Income Gap (I) ratio ($PG=H \times I$) and the latter can be derived by dividing PG by H.

3. Poverty Profile: A regional description

3.1 National trends in poverty

National trends show that poverty was highest in 1985/86, dropping steeply in 1990/91, increasing in 1995/96, and then declining again in 2002. (Table 3.1 and Figure 3.1) Poverty levels in 2002 were in general lower than in 1995/96, but higher than levels in 1990/91.

Table 3.1: Poverty trends overall, 1985-2002

Year	Headcount Index	Poverty Gap	Squared Poverty Gap
1985	36.31	9.55	3.59
1990	21.27	4.48	1.43
1995	29.46	6.70	2.26
2002	22.80	5.07	1.65

Source: Author's calculations from LFSES and HIES data

Figure 3.1: National poverty, 1985-2002

Source: Author's calculations from LFSES and HIES data

3.2 Sectoral trends in poverty

Trends in poverty by sector¹⁵ indicate a continuous decline in the incidence, depth and severity of urban poverty, but fluctuating poverty levels in the rural and estate sectors (Figure 3.2). While poverty (by all three FGT measures) in the rural sector in 2002 was marginally higher than its 1990 levels, estate sector poverty doubled over the same period.

¹⁵ Note that the comparison of sector is not consistent as the definition used changed during this period.

Figure 3.2: Poverty by sector, 1985-2002

Source: Author's calculations from LFSES and HIES data

The bulk of the estate population has a household per capita consumption that is very close to the poverty line (World Bank 2007, Gunewardena 2005). This implies a high degree of vulnerability, as well as sensitivity of poverty measure to the location of the poverty line (Gunewardena 2005). At any given poverty line, slight shifts in consumption of estate sector households - caused by idiosyncratic shocks such as a health shock to the breadwinner, or covariate shocks such as the loss of employment or days of work due to restructuring in the plantations, or rising cost of living with no wage indexation - can lead to very large increases in poverty in this sector (World Bank 2007).¹⁶

Table 3.2: Poverty trends by sector, 1985-2002

Sector	Poverty Measure	1985	1990	1995	2002
	Headcount Index	22.13	15.38	14.84	8.05
Urban	Poverty Gap	5.58	3.49	2.99	1.68
	Squared Poverty Gap	2.08	1.20	0.93	0.53
	Headcount Index	41.54	23.59	31.5	24.72
Rural	Poverty Gap	11.10	4.95	7.28	5.56
	Squared Poverty Gap	4.21	1.57	2.48	1.83
	Headcount Index	24.56	14.85	38.81	30.09
Estate	Poverty Gap	5.28	2.49	7.87	6.01
	Squared Poverty Gap	1.75	0.70	2.48	1.79

Source: Author's calculations from LFSES and HIES data

¹⁶ World Bank 2007 shows that a shock equivalent to 10% of the poverty line could increase poverty in the estate sector by 10%, while the comparable figure for the entire country is 6%. Chapter 8 of World Bank 2007 examines causes of poverty in the estate sector in great detail.

If the Headcount Index (incidence of) poverty answers the question "If an individual lives in a particular area (sector, province, district) what is the likelihood of that individual being poor?", the question "What is the likelihood of a poor person living in a particular area (sector, province, district)?" is answered by the percentage contribution to poverty.¹⁷ Table 3.2 and Figure 3.3 provide these statistics for the urban, rural and estate sectors for the 1985-2002 period and show quite clearly that by all poverty measures, the chances of a poor person being in the rural or estate sector increased while the chances of a poor person being in the urban sector decreased.¹⁸ The chances of a poor person being in the rural sector are 11 times higher than the possibility they will be in the estate sector, and almost 20 times higher than the possibility that they will be in the urban sector.

Figure 3.3: Contribution to poverty by sector, 1985-2002

Headcount Index

(a)

Source: Author's calculations from LFSES and HIES data

¹⁷ This is simply the relevant poverty measure for the sector/province/district divided by the same poverty measure at the national level and multiplied by the population share of that sector/province/district and converted to a percentage.

¹⁸ These figures are not consistent as the definition of sector changed over the period.

Figure 3.3: Contribution to poverty by sector, 1985-2002 (Contd.)

Poverty Gap

(b)

Source: Author's calculations from LFSES and HIES data

Squared Poverty Gap

Source: Author's calculations from LFSES and HIES data

Table 3.3: Contribution to poverty by sector, 1985-2002

Sector	Poverty Measure	1985	1990	1995	2002
	Headcount Index	12.73	15.12	7.01	4.74
Urban	Poverty Gap	12.22	16.32	6.19	4.43
	Squared Poverty Gap	12.09	17.47	5.71	4.32
	Headcount Index	82.58	80.08	88.09	87.41
Rural	Poverty Gap	83.94	79.86	89.43	88.51
	Squared Poverty Gap	84.54	79.18	90.20	89.23
	Headcount Index	4.69	4.80	4.91	7.85
Estate	Poverty Gap	3.84	3.82	4.37	7.05
	Squared Poverty Gap	3.37	3.34	4.09	6.45

Source: Author's calculations from LFSES and HIES data

3.3 Province-level trends in poverty¹⁹

Disaggregated province-level measures of poverty highlight the divergence between predominantly urban areas on the one hand and rural and estate areas on the other hand. Table 3.4 and Figure 3.4 to Figure 3.7 indicate that the only province in which the incidence (and depth and severity) of poverty had declined throughout the period was the Western province (WP).²⁰ This province also had the lowest poverty, clearly indicated in figures Figure 3.5 to Figure 3.7 where provinces are ranked from highest to lowest level of poverty.

Outside the Western province, the incidence, depth and severity of poverty declined between 1986 and 1990 and 1996 and 2002, but rose between 1991 and 1995.²¹ The Uva (UP) and Sabaragamuwa (SGP) provinces which had the highest levels of poverty throughout the

Table 3.4: Poverty trends by Province, 1985-2002

Province	Poverty Measure	1985	1990	1995	2002
Western	Headcount Index	24.09	16.9	17.25	10.83
	Poverty Gap	5.89	3.66	3.36	2.26
	Squared Poverty Gap	2.15	1.18	1.01	0.71
Central	Headcount Index	35.83	25.94	36.89	24.85
	Poverty Gap	8.78	5.85	8.98	5.27
	Squared Poverty Gap	3.06	1.97	3.20	1.65
Southern	Headcount Index	44.99	23.37	32.93	28.27
	Poverty Gap	13.12	5.02	7.66	6.61
	Squared Poverty Gap	5.34	1.63	2.64	2.20

Source: Author's calculations from LFSES and HIES data

¹⁹ The analysis excludes Northern and Eastern provinces (see footnote 2). Population shares (see annexes) are based on survey estimates and exclude population in the North and East.

²⁰ Poverty rates in 1990 and 1995/96 for the Western Province are not found to be significantly different.

²¹ With the exception of the North Western province (NWP), where poverty increased or remained the same in the last period.

²² In 1990-91, when poverty levels were their lowest, Uva and Sabaragamuwa did better than the Central province.

Table 3.4: Poverty trends by Province, 1985-2002 (Contd.)

North Western	Headcount Index	39.16	19.69	27.73	27.48
	Poverty Gap	9.86	3.82	5.43	6.10
	Squared Poverty Gap	3.56	1.13	1.63	2.01
North Central	Headcount Index	40.82	21.1	25.44	21.54
	Poverty Gap	9.46	3.48	4.82	4.37
	Squared Poverty Gap	3.24	0.92	1.36	1.32
Uva	Headcount Index	45.85	24.94	47.14	37.61
	Poverty Gap	13.86	5.14	12.79	9.14
	Squared Poverty Gap	5.71	1.55	4.92	3.26
Sabaragamuwa	Headcount Index	46.02	23.61	42.54	33.55
	Poverty Gap	12.59	5.08	10.52	7.57
	Squared Poverty Gap	4.78	1.71	3.63	2.44

Source: Author's calculations from LFSES and HIES data

Figure 3.4: Poverty by province, 1985-2002

Source: Author's calculations from LFSES and HIES data

Figure 3.5: Headcount Index by province, 1985-2002

Source: Author's calculations from LFSES and HIES data

Figure 3.6: Poverty Gap Index by province, 1985-2002

Source: Author's calculations from LFSES and HIES data

Figure 3.7: Squared Poverty Gap Index by province, 1985-2002

Source: Author's calculations from LFSES and HIES data

Figure 3.5 to Figure 3.7 help to track changes in poverty over the period. Initial poverty rates in 1985-86 show a clear clustering of provinces. The Western province with lowest poverty lies clearly apart from all other provinces, while the next three provinces are Central province, North Western province and North Central province, with the Southern province, Uva province and Sabaragamuwa province clearly having the highest poverty. Rankings appear to remain somewhat stable over the period, except for the Central province. This had the lowest poverty in 1990-1 (admittedly a year when the dispersion of poverty across provinces was fairly narrow), rose to third lowest position in 1995-6 and was third highest in 2002. This high degree of fluctuation in poverty rates in the Central province may be due to the dominance of the estate sector, which, as we have seen, has a large percentage of the population close to the poverty line, making it open to considerable vulnerability.

The fortunes of the North Central province and North Western province remained similar until 2002. In the North Central province, poverty levels since 1990 have remained relatively stable, at a level approximately half that of 1985 levels of poverty. The drastic decline in poverty in 1990 in this region (with the depth and severity of poverty falling to below Western province levels) was attributed to the large infrastructure investments in these regions in the 1980s.²³ In the North Western province, although poverty fell considerably in 1990-1, and the rise in 1995-6 was only slightly higher than that in the North Central province, in 2002, these two provinces diverge. Despite relatively low levels of economic activity and growth in the North Central province, the incidence of poverty fell to 1/5 of the population, and the depth

²³ These were primarily in irrigation, with supporting road and energy investments.

and severity of poverty were only slightly higher than 1990 levels. On the other hand, in the North Western province, headcount poverty remained close to 1995-6 levels, and the depth and severity of poverty increased.

In the last cluster of provinces - Southern province, Uva province and Sabaragamuwa province - poverty changes have followed the overall trend over the period. Gains in 1990-1 were roughly similar for all three provinces, but increases in 1995-96 left SGP and Uva province far below Southern province. While all three provinces managed to reduce poverty in 2002, (by 1/4 in Sabaragamuwa province and Uva province, compared to 1/8 in Southern province) poverty levels in Sabaragamuwa province and Uva province remained considerably higher than in Southern province.

Thus, in 2002, the clustering of provinces returned to that of 1985-86: lowest poverty in Western province, moderate poverty in the Central province, North Central province and North Western province and highest poverty in Southern province, Sabaragamuwa province and Uva province. Changes in ranking *within* clusters were primarily due to the reduction in poverty in the North Central province and Southern province.

Comparing Figure 3.5 with Figure 3.6 and Figure 3.7 shows that ranking reversals can be observed across poverty measures in the first two periods. In 1985-86, the depth and severity of poverty were much greater in Uva province and Southern province than they were in Sabaragamuwa province, which had a similar or higher proportion of people in poverty. Similarly, in 1990-91, the year of lowest poverty in the entire period, the depth and severity of poverty in the North Central province and the severity of poverty in the North Western province were even lower than in the Western province which had the lowest incidence of poverty.

Relative rankings across provinces are constant across measures in the last two periods. This implies that that the depth and severity of poverty are highest where the magnitude of poverty is highest, and vice-versa. However, distances between provinces, vary as illustrated quite clearly in Figure 3.5 to Figure 3.7. For example, in 2002, while headcount poverty outside the Western province had a wide variation, ranging from 22%-38%, with most provinces equidistant from each other, the squared poverty gap measure is much less dispersed, with five provinces in the narrow band from 1.3% to 2.4%, but with Uva province lagging behind at 3.2%

Table 3.5 and Figure 3.8 provide calculations of the contribution to poverty by province, and indicate that although approximately one in ten people in the Western province are poor (Table 3.4), the chances of a poor person being from Western province are higher, at 15%. This figure too has steadily declined from 1990 onward. On the other hand, while more than one in three persons in Uva province and Sabaragamuwa province were poor, the chances of a poor person being from Uva province is 12% and from Sabaragamuwa province is 16%, reflecting the distribution of population in these provinces.

In 2002, the poor people in the Western, Central and Southern provinces made up half the number of poor people in the country. This was a decline from previous years, primarily due to the steady decline in the share of the Western province, and to a lesser extent due to the decline in the share of the Central province. The increase in the share of Uva and Sabaragamuwa provinces in the last 10 years is also evident, as is the increase in the North Western province in the last 5 years, returning to 1985 proportions of the relative share in poverty.

Relative shares in the Poverty Gap and Squared Poverty Gap indices do not diverge greatly across provinces, but three distinct patterns are evident. In some provinces (North Western province, Sabaragamuwa province) the contribution to overall poverty in these provinces are similar across all three measures. In other provinces (Western province, Central province,

North Central province) the contribution of higher order measures of poverty (reflecting contribution to the depth and severity of poverty) is lower. These are also provinces where (in 2002) headcount poverty incidence is lower. In the third category (Southern province and Uva province), the contribution to the overall depth and severity of poverty is higher than the contribution to the incidence of poverty. These results confirm the evidence from measures of incidence that the poorest provinces also have the highest depth and severity of poverty.

Figure 3.8 underscores that the share of the Western province has declined over the years, while the share of Uva province has increased, for all three measures of poverty.

Table 3.5: Contribution to poverty by province, 1985-2002

Province	Poverty Measure	1985	1990	1995	2002
Western	Headcount Index	20.28	24.07	18.79	15.44
	Poverty Gap	18.85	24.78	16.1	14.51
	Squared Poverty Gap	18.28	25.03	14.26	13.98
Central	Headcount Index	14.98	18.35	18.97	16.22
	Poverty Gap	13.97	19.67	20.29	15.48
	Squared Poverty Gap	12.92	20.67	21.43	14.82
Southern	Headcount Index	18.66	16.69	16.58	17.58
	Poverty Gap	20.7	17.03	16.94	18.49
	Squared Poverty Gap	22.4	17.34	17.27	18.89
North Western	Headcount Index	14.72	12.74	12.35	16.05
	Poverty Gap	14.11	11.75	10.62	16.02
	Squared Poverty Gap	13.53	10.88	9.46	16.22
North Central	Headcount Index	7.76	6.94	5.39	6.37
	Poverty Gap	6.84	5.43	4.49	5.81
	Squared Poverty Gap	6.23	4.49	3.74	5.37
Uva	Headcount Index	9.01	8.47	11.55	12.02
	Poverty Gap	10.36	8.3	13.77	13.14
	Squared Poverty Gap	11.33	7.85	15.68	14.35
Sabaragamuwa	Headcount Index	14.58	12.74	16.36	16.32
	Poverty Gap	15.17	13.04	17.78	16.56
	Squared Poverty Gap	15.31	13.74	18.16	16.37

Source: Author's calculations from LFSES and HIES data

Figure 3.8: Distribution of poverty by province

Headcount Index

(a)

Poverty Gap

(b)

Figure 3.8: Distribution of poverty by province (Contd.)

Squared Poverty Gap

(c)

Source: Author's calculations from LFSES and HIES data

3.4 District-level trends in poverty

Disaggregated measures of poverty at the district level are given in Table 3.6 and Figure 3.9.²⁴ The latter illustrates quite clearly that poverty is high, and has remained high in the districts of Moneragala, Ratnapura, Badulla and Kegalle.²⁵ Within Uva province and Sabaragamuwa province, one sees convergence between districts between 1995-6 and 2002, with the incidence of poverty in Moneragala and Ratnapura declining to the levels of Badulla and Kegalle, respectively. Section 4.2 indicates that adverse redistribution in the Uva province and Sabaragamuwa province contributed to the rise in poverty in this period and confirms that this occurred *within* districts rather than *between* districts.

²⁴ Note that poverty rates for 1990-91 reported here differ from those published by DCS. It is not clear why this should be given that the same data and poverty line were used. Stata do-files used by the author are available upon request.

²⁵ Badulla and Moneragala districts together comprise the Uva province, while Ratnapura and Kegalle comprise Sabaragamuwa province.

Table 3.6: Trends in poverty by district, 1985-2002

Poverty indices		1985	1990	1995	2002
Colombo	Headcount Index	15.33	14.55	13.07	6.34
	Poverty Gap	3.61	3.45	2.26	1.23
	Squared Poverty Gap	1.31	1.18	0.61	0.39
Gampaha	Headcount Index	32.15	13.57	15.11	10.69
	Poverty Gap	8.01	2.46	2.62	2.22
	Squared Poverty Gap	2.96	0.70	0.72	0.68
Kalutara	Headcount Index	28.88	27.21	30.08	20.11
	Poverty Gap	7.08	6.03	7.09	4.42
	Squared Poverty Gap	2.55	1.96	2.38	1.41
Kandy	Headcount Index	40.88	31.5	37.5	24.46
	Poverty Gap	10.51	7.1	10.12	5.53
	Squared Poverty Gap	3.78	2.36	3.80	1.80
Matale	Headcount Index	40.1	23.41	41.84	29.64
	Poverty Gap	9.27	5.57	10.81	6.25
	Squared Poverty Gap	3.04	1.87	4.04	1.79
Nuwara Eliya	Headcount Index	20.89	14.96	33.08	22.58
	Poverty Gap	4.42	3.16	6.09	4.21
	Squared Poverty Gap	1.42	1.11	1.76	1.28
Galle	Headcount Index	45.7	23.86	31.92	26.3
	Poverty Gap	13.01	5.3	7.8	5.85
	Squared Poverty Gap	5.12	1.78	2.84	1.96
Matara	Headcount Index	37.73	22.34	35.54	27.65
	Poverty Gap	10.04	4.73	8.06	6.63
	Squared Poverty Gap	3.98	1.47	2.73	2.19
Hambantota	Headcount Index	54.61	24.01	30.92	32.85
	Poverty Gap	17.97	4.92	6.80	8.00
	Squared Poverty Gap	7.82	1.61	2.14	2.68
Kurunegala	Headcount Index	40.62	19.31	26.29	25.05
	Poverty Gap	10.44	3.58	5.1	5.47
	Squared Poverty Gap	3.86	1.02	1.51	1.79
Puttalam	Headcount Index	35.6	20.58	31.09	32.43
	Poverty Gap	8.45	4.41	6.19	7.36
	Squared Poverty Gap	2.84	1.41	1.93	2.47

Table 3.6: Trends in poverty by district, 1985-2002 (Contd.)

Anuradhapura	Headcount Index	45.9	22.07	27.79	20.37
	Poverty Gap	10.86	3.55	4.90	4.04
	Squared Poverty Gap	3.75	0.90	1.29	1.15
Polonnaruwa	Headcount Index	29.49	18.92	20.64	23.94
	Poverty Gap	6.33	3.31	4.68	5.05
	Squared Poverty Gap	2.12	0.96	1.49	1.66
Badulla	Headcount Index	43.64	24.59	41.69	37.46
	Poverty Gap	13.22	4.88	10.24	8.76
	Squared Poverty Gap	5.48	1.44	3.55	2.96
Moneragala	Headcount Index	50.47	25.67	56.17	37.89
	Poverty Gap	15.21	5.66	17.02	9.87
	Squared Poverty Gap	6.19	1.78	7.19	3.84
Ratnapura	Headcount Index	51.16	22.05	46.61	34.39
	Poverty Gap	14.59	4.28	12.03	7.81
	Squared Poverty Gap	5.77	1.33	4.20	2.56
Kegalle	Headcount Index	39.88	25.56	37.84	32.46
	Poverty Gap	10.19	6.09	8.78	7.25
	Squared Poverty Gap	3.60	2.19	2.97	2.29

Source: Author's calculations from LFSES and HIES data

At the other extreme, disaggregation of poverty in the Western province indicates that a continuous decline occurred only in the Colombo district. In both Gampaha and Kalutara, poverty rose marginally between 1990-1 and 1995-6. While Gampaha district experienced the greatest decline in poverty over the entire 22-year period, poverty levels in Kalutara remained considerably higher than in the other two districts in 2002. District level changes do not appear to be related to patterns of redistribution, indicating that distributional changes within the province were dominated by distributional changes *within* districts rather than between districts.

The pattern of rank reversals indicated in the previous section in relation to the Central province are somewhat illuminated by district-level disaggregation. For e.g. in 1990-1, the Central province had the highest incidence of poverty. This was when poverty fell drastically in most provinces (Figure 3.4) including in the Central province, but to a lesser extent. Figure 3.9 shows that while Matale experienced this large decline in poverty (which was also experienced in districts where non-plantation agriculture is an important livelihood), this was much less the case in Kandy and Nuwara Eliya where urban and estate livelihoods are more dominant. The improvement in the relative position of the Central province in 1995-6 is due to the fact that poverty increases were smaller in these districts, especially in Kandy. Between 1995 and 2002, the fall in poverty was much larger than in other districts, and this appears to be true for Matale and Nuwara Eliya as well.

In the Southern province, levels of poverty by district converged in 1990-91, with drastic declines in poverty in all three districts of Galle, Matara and Hambantota, but diverged thereafter, with poverty rising continuously in Hambantota from 1990-1 onward. Part of the favourable redistribution experienced in the Southern province in the 1986-1990 period (Section 4.2) may have been due to the convergence in districts (especially the large decline in poverty in Hambantota) during this period.

The gradual worsening of the relative position of the North Western province since 1990 appears to be largely driven by the increase in poverty in Puttalam since 1995-6. This is consistent with the influx into this district of large numbers of people displaced by the civil conflict. However, the increase in depth and severity of poverty between 1995/96 and 2002 in the North Western province is due to sharp increases in these measures in *both* Puttalam and Kurunegala districts.

In the North Central province, sharp declines in poverty between 1986 and 1990 occurred in both Anuradhapura and Polonnaruwa. North Central province continued to improve its relative ranking in 1995-6 as the province with the second lowest incidence of poverty and maintained this position in 2002 despite poverty increasing in both districts in 1995-6, and in the latter in 2002. This is because the size of the increase in poverty in both these years was relatively small.

Figure 3.9: Poverty by district, 1985-2002

Source: Author's calculations from LFSES and HIES data

Figure 3.10: Headcount Index by district, 1985-2002

Source: Author's calculations from LFSES and HIES data

Figure 3.11: Poverty Gap Index by district, 1985-2002

Source: Author's calculations from LFSES and HIES data

Figure 3.12: Squared Poverty Gap Index by district, 1985-2002

Source: Author's calculations from LFSES and HIES data

Table 3.7 and Figure 3.13 indicate the probability of a poor person being from a particular district. The chances of a poor person being in Kurunegala district, which has a large population, are highest, at close to 10%, while they are lowest in Polonnaruwa, *for both the beginning and end of this period*. When regional disparities in poverty are low, as in 1990-1, relative population shares play a large role in determining the location of the highest numbers of people in poverty. Thus, in 1990-1, the probability of a poor person being in Colombo was three times the probability of a person being in Moneragala. When there is greater divergence in poverty measures across districts, this is not the case, and in 2002, it was just as likely that a poor person would be in Moneragala as it was that they were in Colombo. When a district's relative contribution to the depth and severity of poverty is greater than its contribution to the incidence of poverty, as in the case of Moneragala in 1995-6 and 2002 and Kandy, Ratnapura and Matale in 1995-6, this is indicative that the depth and severity of poverty in these districts is considerable.

Table 3.7: Contribution to poverty by district, 1985-2002

Contribution to poverty		1985	1990	1995	2002
Colombo	Headcount Index	5.64	9.21	6.02	3.67
	Poverty Gap	5.05	10.39	4.56	3.20
	Squared Poverty Gap	4.87	11.15	3.65	3.13
Gampaha	Headcount Index	9.47	6.64	6.21	5.96
	Poverty Gap	8.98	5.73	4.74	5.56
	Squared Poverty Gap	8.80	5.06	3.86	5.23
Kalutara	Headcount Index	5.17	8.22	6.57	5.81
	Poverty Gap	4.82	8.66	6.80	5.74
	Squared Poverty Gap	4.61	8.82	6.75	5.62
Kandy	Headcount Index	9.71	12.63	9.78	8.38
	Poverty Gap	9.49	13.53	11.60	8.51
	Squared Poverty Gap	9.06	14.1	12.89	8.51
Matale	Headcount Index	3.13	3.14	3.85	3.52
	Poverty Gap	2.75	3.56	4.37	3.34
	Squared Poverty Gap	2.40	3.73	4.84	2.93
Nuwara Eliya	Headcount Index	2.14	2.58	5.35	4.32
	Poverty Gap	1.73	2.58	4.32	3.62
	Squared Poverty Gap	1.47	2.84	3.7	3.38
Galle	Headcount Index	8.07	7.20	6.79	7.11
	Poverty Gap	8.74	7.61	7.29	7.12
	Squared Poverty Gap	9.14	7.99	7.85	7.31
Matara	Headcount Index	5.41	5.53	6.15	5.72
	Poverty Gap	5.47	5.57	6.13	6.17
	Squared Poverty Gap	5.76	5.40	6.13	6.23
Hambantota	Headcount Index	5.19	3.95	3.65	4.75
	Poverty Gap	6.49	3.84	3.52	5.21
	Squared Poverty Gap	7.50	3.95	3.28	5.34
Kurunegala	Headcount Index	10.83	8.84	8.18	9.82
	Poverty Gap	10.59	7.78	6.97	9.66
	Squared Poverty Gap	10.39	6.92	6.1	9.66
Puttalam	Headcount Index	3.89	3.9	4.17	6.23
	Poverty Gap	3.51	3.97	3.65	6.36
	Squared Poverty Gap	3.14	3.97	3.36	6.55

Table 3.7: Contribution to poverty by district, 1985-2002 (Contd.)

Anuradhapura	Headcount Index	6.02	5.03	3.96	4.05
	Poverty Gap	5.42	3.84	3.07	3.61
	Squared Poverty Gap	4.97	3.05	2.39	3.15
<hr/>					
Polonnaruwa	Headcount Index	1.74	1.91	1.43	2.33
	Poverty Gap	1.42	1.59	1.43	2.21
	Squared Poverty Gap	1.26	1.44	1.35	2.22
<hr/>					
Badulla	Headcount Index	5.80	5.61	6.37	7.91
	Poverty Gap	6.68	5.29	6.88	8.32
	Squared Poverty Gap	7.35	4.90	7.06	8.61
<hr/>					
Moneragala	Headcount Index	3.21	2.87	5.18	4.11
	Poverty Gap	3.68	3.01	6.90	4.82
	Squared Poverty Gap	3.98	2.95	8.62	5.74
<hr/>					
Ratnapura	Headcount Index	8.83	6.61	9.60	9.45
	Poverty Gap	9.57	6.09	10.89	9.65
	Squared Poverty Gap	10.06	5.93	11.26	9.69
<hr/>					
Kegalle	Headcount Index	5.76	6.13	6.76	6.87
	Poverty Gap	5.60	6.95	6.89	6.91
	Squared Poverty Gap	5.25	7.81	6.90	6.68

Source: Author's calculations from LFSES and HIES data

Figure 3.13: Contribution to poverty by district, FGT measures

Source: Author's calculations from LFSES and HIES data

4. Growth, Distribution and Poverty Reduction

Poverty changes can be broken down into two components: those due to changes in average consumption of the entire population with no change in the distribution (distribution-neutral growth), and those due to redistribution of consumption at a given average level.

4.1 Simulations of poverty reduction based on distribution-neutral growth

If there is no change in the current (2002) distribution of per capita consumption expenditure, and if average consumption increases by 2% annually, the Headcount Index could in theory have reduced to 17% in the 5 years between 2002 and 2007, and to 6% in 15 years (Table 4.1). Given that average per capita GDP in the 1990-2002 period grew by 3.2% (3.9% in the 1991-96 period, and 2.5% during 1996-2002), and even allowing for a lower growth in consumption expenditure than in GDP, this is not an unlikely scenario. More optimistic scenarios suggest that poverty could be reduced much faster with higher growth and could be virtually eradicated by 2017 if distribution-neutral²⁶ consumption growth is as high as 5%.

Table 4.1: Predicted poverty rates based on different growth scenarios

Growth Rate	Year		
	2007	2012	2017
	Headcount Index		
2%	17.18	12.55	5.82
3%	14.61	8.73	1.96
4%	12.63	5.88	0.68
5%	10.69	3.60	0.22
	Poverty Gap		
2%	3.51	2.35	0.89
3%	2.89	1.50	0.30
4%	2.36	0.91	0.10
5%	1.91	0.54	0.03
	Squared Poverty Gap		
2%	1.08	0.67	0.23
3%	0.86	0.41	0.08
4%	0.68	0.24	0.02
5%	0.53	0.14	0.01

Source: Author's calculations from LFSES and HIES data

However, even achieving a 2% consumption growth rate for all households in Sri Lanka may be a difficult task. Growth in the agricultural sector in the last 10 years has been extremely low (see Table 4.2). The rural sector accounts for over 80% of the population in poverty, and those living in households with a head whose main occupation is in the agricultural sector account for 37% of the poor (Table 5.14), therefore the prospects for reducing poverty via aggregate growth may not be as good as indicated in the table above. The broad implication is that either growth in the agricultural sector must improve, or the poor need to move out of the agricultural sector in order to escape poverty.

²⁶ That is to say, the current distribution of income does not change.

Table 4.2: Per capita growth rate by economic sector

	1991-96	1996-02	1990-02
Agriculture	-0.0	0.4	0.2
Industry	5.7	3.0	4.1
Services	4.4	3.3	3.8
GDP	3.9	2.5	3.2

Source: Central Bank Annual Reports

Growth outside the Western province has also been moderate. In the next section we examine the relative contribution that growth and redistribution have played in changes in poverty at the regional level.

4.2 Growth and inequality decompositions of poverty changes

Poverty decreases when mean consumption rises, or when the distribution of consumption moves in favour of the poor. Poverty changes can be decomposed into the component due to a distribution-neutral change in mean consumption and a component due to a mean-constant change in the distribution of consumption.

In this section, we present decomposition results, and attempt some explanation for the patterns observed. The explanations are speculative and intended as a starting point for further analysis.

Several methods are used in practice to estimate this decomposition (see World Bank 2007, Annex 2 for a brief overview). We use the method proposed by Datt and Ravallion (1992) in this study. They show that any given change in consumption poverty, as measured by the FGT measures of poverty, can be decomposed into its growth component, its redistribution component and a residual (Datt and Ravallion, 1992).

$$P_{t+n} - P_t = \underbrace{G(t, t+n; r)}_{\text{[growth component]}} + \underbrace{D(t, t+n; r)}_{\text{[redistribution component]}} + \underbrace{R(t, t+n; r)}_{\text{[residual]}}$$

$$G(t, t+n; r) = P(zn/\mu_{t+n}, L_t) - P(zn/\mu_t, L_t)$$

$$D(t, t+n; r) = P(zn/\mu_t, L_{t+n}) - P(zn/\mu_t, L_t)$$

where t is the initial period, $t+n$ is the final period, and r is the reference period, zn is the poverty line, μ is mean consumption, and L is the Lorenz (distribution) curve.

Thus, the growth component over a period holds the distribution constant and calculates poverty measures as if only the mean had changed over the period. The redistribution component holds the mean constant and calculates poverty measures on the basis that only the distribution has changed. Thus, a simpler way of stating the equation above is:

- The change in poverty = (1) Change in poverty if the distribution did not change and only consumption growth took place
+ (2) Change in poverty if there was no consumption growth but only the distribution changed
+ (3) A residual

Table 4.3 to Table 4.4 present decompositions of poverty changes in Sri Lanka for the entire 1985-2002 period, and sub-periods within this period. Changes from 1985/6-1990/1, 1990/1-1995/6 and 1995/96-2002 are given in Figure 4.1 to Figure 4.12.

A negative (positive) figure in the last column indicates the size of the total fall (rise) in poverty. A negative sign for the growth component indicates that *positive* consumption growth occurred, and contributed to the reduction in poverty. Similarly, a negative sign for the redistribution component indicates that favourable redistribution *reduced* poverty. On the other hand, a positive sign for the growth component indicates that consumption fell, contributing to a *rise* in poverty, and a positive sign for the redistribution component indicates adverse redistribution that contributed to a rise in poverty.

Table 4.3: Growth and redistribution composition of national changes in poverty

Poverty Measure and Period	Growth	Redistribution	Residual	Total Change in poverty
Headcount Index				
1985-2002	-21.9	9.4	-1.0	-13.5
1985-1990	-11.7	-2.6	-0.8	-15.0
1990-2002	-10.0	13.8	-2.3	1.5
1990-1995	6.0	1.9	0.3	8.2
1995-2002	-17.2	11.3	-0.7	-6.7
Poverty Gap				
1985-2002	-6.6	4.4	-2.3	-4.5
1985-1990	-3.8	-1.6	0.3	-5.1
1990-2002	-2.4	4.7	-1.7	0.6
1990-1995	1.6	0.5	0.1	2.2
1995-2002	-4.4	4.8	-2.1	-1.6
Squared Poverty Gap				
1985-2002	-2.6	2.1	-1.4	-1.9
1985-1990	-1.6	-0.8	0.2	-2.2
1990-2002	-0.8	1.9	-0.9	0.2
1990-1995	0.6	0.2	0.0	0.8
1995-2002	-1.6	2.2	-1.2	-0.6

Source: Author's calculations from LFSES and HIES data

Figure 4.1: Decomposition of national poverty changes, 1985-2002, Headcount Index

Source: Author's calculations from LFSES and HIES data

The figures denoting the Headcount Index in the first panel of Table 4.3 are graphed in Figure 4.1. In Figure 4.1(a) the total change in poverty and its components are given in percentage points. For example the percentage of the population in poverty declined from 36% in 1985/86 to 21% in 1990/91, a total of 15 percentage points. Almost 12 percentage points of that were due to consumption growth, while close to three percentage points were due to favourable redistribution. Thus, had there been no change in the distribution of income between 1985/86 and 1990/91, headcount poverty would only have declined to 24%. Alternatively, had there been no consumption growth between 1985/86 and 1990/91, the decline in poverty would have been marginal, from 36% to 33%. These components are shown as percentage shares of the total change in poverty in Figure 4.1(b).²⁷ This graph indicates that in spells of poverty reduction as well as in spells of increasing poverty, the contribution of growth (or lack of it) dominates. In the first period, growth is responsible for over 80% of the reduction in poverty, while in the second, the lack of growth accounts for 75% of the increase in poverty. In the first two periods, redistribution follows the direction of growth - rising consumption is accompanied by favourable redistribution, falling consumption is accompanied by unfavourable distribution. It is in the last period that these two components diverge; had inequality not changed, poverty reduction would have been almost three times what it was and had there been no growth, the increase in poverty would have been twice the size of the reduction.

Figure 4.2: Decomposition of national poverty changes, 1985-2002, Poverty Gap and Squared Poverty Gap Index

Source: Author's calculations from LFSES and HIES data

²⁷ In the interest of simplifying the graphs and conserving space, the share of the residuals has been omitted from all the figures. Their magnitude is given in the corresponding tables.

Figure 4.2 and the next two panels of Table 4.3 indicate that a similar pattern can be seen when the other two measures of poverty are used. However, the share of redistribution is marginally higher in relation to its percentage share contribution to headcount poverty, especially evident in the first and last periods. Nevertheless, more than 2/3 of the contribution to poverty reduction (increase) is made by growth (or the lack of it).

Various reasons have been adduced to explain this pattern. In the first two periods, the close correspondence between poverty and the fortunes of the agriculture sector tell the main story, while in the last period, the story is rather of poverty declining in the growing service/manufacturing sector, with agricultural regions lagging behind.

The sectorally disaggregated measures are given in Figure 4.3 and in Table 4.4. The rural figures and trend closely parallel the national figures, which is not surprising given that a large percentage of the population is rural. Urban and estate decompositions in the last period are similar to that of the rural, except that growth has a slightly larger impact in the urban sector, and redistribution in the estate sector.

However, in the first period, redistribution has been unfavourable in both urban and estate sectors, diluting the poverty-reducing effect of growth in those sectors. This indicates that whatever mechanism was responsible for shifting consumption toward the poor in the rural sector was not operating in the urban and estate sectors. This is consistent with broad-based consumption growth in this period being generated in the non-plantation agricultural sector. In the second period, when poverty increased, the estate sector followed the pattern evident in the rural sector, except that the impact of unfavourable redistribution on the increase in poverty was much greater in the estate sector. However, in the urban sector, redistribution was favourable, mitigating the effect of negative consumption growth. Moreover, it appears that growth and redistribution operate in opposite directions in the urban sector; when consumption growth is rising, redistribution is away from the poor, when consumption growth is falling, redistribution is pro-poor. What mechanism underlies this pattern? One might expect that growth fuelled by industrial and manufacturing growth might have a slower 'trickle-down' effect than agricultural growth, but what might explain the safety net type behaviour of redistribution during the period of negative consumption growth? Were redistributive programmes (such as the Samurdhi welfare benefit programme) better targeted in the urban sector? Or are low incomes more secure in urban areas during periods of low growth?

Sectoral decomposition of measures of poverty that focus on the depth of poverty and inequality below the poverty line are given in Figure 4.4. Redistribution has a larger impact on these measures, which is to be expected, especially with regard to the squared poverty gap which highlights distributional changes. It is interesting, then, that the share of *growth* in the contribution to poverty reduction as measured by the poverty gap and squared poverty gap in the urban and estate sectors in the 1985/86-1990/91 period is somewhat larger than its share in the headcount index measure. The inference is that in these sectors, consumption growth did more to increase consumption levels of the poor than to move people out of poverty, i.e. over the poverty line. A deeper understanding of the underlying factors contributing to growth and redistribution in this period would be helpful.

Figure 4.3: Decomposition of sectoral poverty changes, 1985-2002, Headcount Index

Source: Author's calculations from LFSES and HIES data

Figure 4.4: Decomposition of sectoral poverty changes, 1985-2002, Poverty Gap and Squared Poverty Gap Index

Figure 4.4: Decomposition of sectoral poverty changes, 1985-2002, Poverty Gap and Squared Poverty Gap Index (Contd.)

Source: Author's calculations from LFSES and HIES data

Table 4.4: Growth and redistribution composition of sectoral changes in poverty

	Urban				Rural				Estate			
	G	D	R	Total	G	D	R	Total	G	D	R	Total
Headcount index												
1985-2002	-14.0	0.6	-0.7	-14.1	-24.6	6.3	1.4	-16.8	-17.9	44.0	-20.6	5.5
1985-1990	-7.6	2.3	-1.4	-6.7	-12.9	-4.8	-0.2	-18.0	-10.4	5.0	-4.2	-9.7
1990-2002	-6.6	-0.3	-0.5	-7.3	-11.1	13.7	-1.5	1.1	-9.3	35.4	-10.9	15.2
1990-1995	4.5	-4.3	-0.8	-0.5	6.4	1.3	0.2	7.9	6.8	15.3	1.8	23.9
1995-2002	-9.7	3.9	-1.0	-6.8	-18.1	11.4	-0.2	-6.8	-26.9	21.2	-3.0	-8.7
Poverty Gap												
1985-2002	-3.9	0.1	-0.1	-3.9	-7.6	3.8	-1.8	-5.5	-4.0	13.7	-9.0	0.7
1985-1990	-2.3	0.4	-0.2	-2.1	-4.3	-2.4	0.5	-6.2	-2.6	0.1	-0.4	-2.8
1990-2002	-1.7	-0.1	0.1	-1.8	-2.7	5.0	-1.7	0.6	-1.5	9.3	-4.3	3.5
1990-1995	1.1	-1.4	-0.3	-0.5	1.8	0.5	0.1	2.3	1.3	3.0	1.1	5.4
1995-2002	-2.1	1.5	-0.7	-1.3	-4.7	5.2	-2.1	-1.7	-5.6	7.4	-3.7	-1.9
Squared Poverty Gap												
1985-2002	-1.5	0.0	-0.0	-1.5	-3.1	1.9	-1.2	-2.4	-1.4	5.4	-4.0	0.0
1985-1990	-0.9	0.1	-0.1	-0.9	-1.8	-1.2	0.4	-2.6	-0.9	-0.2	-0.0	-1.0
1990-2002	-0.7	-0.1	0.0	-0.7	-0.9	2.1	-0.9	0.3	-0.4	3.3	-1.8	1.1
1990-1995	0.4	-0.6	-0.1	-0.3	0.7	0.2	0.1	0.9	0.4	1.0	0.4	1.8
1995-2002	-0.7	0.7	-0.4	-0.4	-1.7	2.4	-1.3	-0.6	-1.8	3.0	-2.0	-0.7

Notes: G – Growth, D – Redistribution, R – Residual, Total – total change in poverty

Source: Author's calculations from LFSES and HIES data

Decompositions of provincial changes in poverty are given in Figure 4.5 and in Table 4.5. In the first period, each of the provinces appears to follow either the urban/estate decomposition of predominant growth offsetting unfavourable redistribution, or the rural pattern of predominant growth accompanied by favourable redistribution. The Western and Central provinces fall into the first category, while all the others are in the second category. In the second period, when poverty rose, favourable *redistribution within* the Western province had offset the increase in poverty caused by lack of consumption growth, so that headcount poverty barely changed. In the North Central province, the negative growth was mitigated somewhat by favourable redistribution, and in the North Western province, inequality remained the same. However, in all the other provinces, including the Central province, the rural pattern of negative growth, as well as unfavourable redistribution *within* the province was evident. Moreover, the impact of negative growth is much lower, and that of unfavourable redistribution appears to be much greater in many of the 'rural-type' provinces, especially, those with the largest increases in poverty (Uva and Sabaragamuwa). Thus it appears that unfavourable redistribution *within* these provinces (possibly from rural to urban areas) has contributed to a lowering of overall mean consumption in the rural areas. In the third period, the pattern experienced by all sectors and provinces is similar: consumption growth was accompanied by unfavourable redistribution; in most provinces, growth effects outweighed distribution effects, except in the North Western province.

Figure 4.5: Decomposition of provincial poverty changes, 1985-2002, Headcount Index

Source: Author's calculations from LFSES and HIES data

Poverty gap and squared poverty gap results are shown in Figure 4.6 below, and correspond to the results for the Headcount Index.

Figure 4.6: Decomposition of sectoral poverty changes, 1985-2002, Poverty Gap and Squared Poverty Gap Index

Figure 4.6: Decomposition of sectoral poverty changes, 1985-2002, Poverty Gap and Squared Poverty Gap Index (Contd.)

Source: Author's calculations from LFSES and HIES data

Table 4.5: Growth and redistribution composition of provincial changes in poverty

Period	Growth	Redistribution	Residual	Total Change in Poverty
Western province				
Headcount Index				
1985/6-2002	-15.5	2.8	-0.5	-13.3
1985/6-1990/1	-8.7	3.3	-1.8	-7.2
1990/1-2002	-7.4	1.6	-0.3	-6.1
1990/1-1995/6	4.9	-4.3	-0.3	0.4
1995/6-2002	-11.7	5.7	-0.4	-6.4
Poverty Gap				
1985/6-2002	-4.2	1.3	-0.7	-3.6
1985/6-1990/1	-2.4	0.5	-0.3	-2.2
1990/1-2002	-2	0.7	-0.1	-1.4
1990/1-1995/6	1.3	-1.3	-0.3	-0.3
1995/6-2002	-2.4	2.4	-1	-1.1
Squared Poverty Gap				
1985/6-2002	-1.6	0.5	-0.4	-1.4
1985/6-1990/1	-1	0.1	-0.1	-1
1990/1-2002	-0.7	0.3	-0.1	-0.5
1990/1-1995/6	0.5	-0.5	-0.1	-0.2
1995/6-2002	-0.8	1.1	-0.6	-0.3
Central province				
Headcount Index				
1985/6-2002	-22.9	17.5	-5.6	-11
1985/6-1990/1	-12	4	-1.9	-9.9
1990/1-2002	-11.4	13.6	-3.3	-1.1
1990/1-1995/6	6.6	3.9	0.5	10.9
1995/6-2002	-20	10.3	-2.4	-12
Poverty Gap				
1985/6-2002	-6.5	6.7	-3.7	-3.5
1985/6-1990/1	-3.7	1.1	-0.3	-2.9
1990/1-2002	-2.9	4	-1.7	-0.6
1990/1-1995/6	1.9	0.9	0.3	3.1
1995/6-2002	-5.6	3.6	-1.7	-3.7
Squared Poverty Gap				
1985/6-2002	-2.4	3	-2	-1.4
1985/6-1990/1	-1.5	0.5	-0.1	-1.1
1990/1-2002	-1.1	1.5	-0.8	-0.3
1990/1-1995/6	0.8	0.3	0.1	1.2
1995/6-2002	-2.1	1.5	-1	-1.6
Southern province				
Headcount Index				
1985/6-2002	-24.2	6.9	0.6	-16.7
1985/6-1990/1	-12.9	-7.9	-0.8	-21.6
1990/1-2002	-10.5	18.4	-3	4.9
1990/1-1995/6	6.4	2.9	0.3	9.6
1995/6-2002	-19	13.6	0.7	-4.7

Table 4.5: Growth and redistribution composition of provincial changes in poverty (Contd.)

Poverty Gap				
1985/6-2002	-8.3	3.7	-1.9	-6.5
1985/6-1990/1	-4.6	-4.3	0.8	-8.1
1990/1-2002	-2.7	6.5	-2.2	1.6
1990/1-1995/6	1.8	0.6	0.2	2.6
1995/6-2002	-4.9	6.5	-2.6	-1
Squared Poverty Gap				
1985/6-2002	-3.7	1.8	-1.2	-3.1
1985/6-1990/1	-2.1	-2.2	0.7	-3.7
1990/1-2002	-0.9	2.7	-1.2	0.6
1990/1-1995/6	0.7	0.3	0.1	1
1995/6-2002	-1.8	3.1	-1.7	-0.4
North Western province				
Headcount Index				
1985/6-2002	-24.6	13.8	-0.8	-11.7
1985/6-1990/1	-13.5	-7.4	1.5	-19.5
1990/1-2002	-10.1	21.8	-3.9	7.8
1990/1-1995/6	6.4	-0.1	1.7	8
1995/6-2002	-17.8	20.2	-2.6	-0.3
Poverty Gap				
1985/6-2002	-7.1	6.7	-3.4	-3.8
1985/6-1990/1	-4.1	-2.7	0.8	-6
1990/1-2002	-2.2	7.2	-2.7	2.3
1990/1-1995/6	1.6	0	0.1	1.6
1995/6-2002	-3.9	8.4	-3.8	0.7
Squared Poverty Gap				
1985/6-2002	-2.7	3.2	-2.1	-1.5
1985/6-1990/1	-1.6	-1.2	0.4	-2.4
1990/1-2002	-0.7	2.9	-1.4	0.9
1990/1-1995/6	0.5	0	0	0.5
1995/6-2002	-1.2	3.8	-2.1	0.4
North Central province				
Headcount Index				
1985/6-2002	-28.3	7	2.1	-19.3
1985/6-1990/1	-14.5	-5.6	0.4	-19.7
1990/1-2002	-13.2	14	-0.4	0.4
1990/1-1995/6	7.4	-2	-1.1	4.3
1995/6-2002	-17.4	16.4	-2.9	-3.9
Poverty Gap				
1985/6-2002	-7	3.9	-2	-5.1
1985/6-1990/1	-4.2	-2.2	0.5	-6
1990/1-2002	-2.2	4.9	-1.8	0.9
1990/1-1995/6	1.7	-0.2	-0.1	1.3
1995/6-2002	-3.7	6	-2.8	-0.5
Squared Poverty Gap				
1985/6-2002	-2.5	1.9	-1.3	-1.9
1985/6-1990/1	-1.6	-1.1	0.4	-2.3

Table 4.5: Growth and redistribution composition of provincial changes in poverty (Contd.)

1990/1-2002	-0.6	2	-1	0.4
1990/1-1995/6	0.5	-0.1	0	0.4
1995/6-2002	-1.1	2.6	-1.6	0
Uva province				
Headcount Index				
1985/6-2002	-23.6	18.5	-3.1	-8.2
1985/6-1990/1	-11.3	-6.3	-3.4	-20.9
1990/1-2002	-11.8	28.5	-4.1	12.7
1990/1-1995/6	7.4	14.4	0.4	22.2
1995/6-2002	-22.5	12.1	0.9	-9.5
Poverty Gap				
1985/6-2002	-8.7	8.3	-4.3	-4.7
1985/6-1990/1	-4.7	-4.6	0.6	-8.7
1990/1-2002	-2.9	10.4	-3.5	4
1990/1-1995/6	1.9	4.9	0.8	7.7
1995/6-2002	-7.3	6.1	-2.4	-3.6
Squared Poverty Gap				
1985/6-2002	-4	4	-2.5	-2.5
1985/6-1990/1	-2.3	-2.6	0.7	-4.2
1990/1-2002	-0.9	4.6	-1.9	1.7
1990/1-1995/6	0.7	2.2	0.5	3.4
1995/6-2002	-3.1	3	-1.5	-1.7
Sabaragamuwa province				
Headcount Index				
1985/6-2002	-26.5	14.7	-0.6	-12.5
1985/6-1990/1	-13.7	-10.6	1.9	-22.4
1990/1-2002	-11.7	26	-4.4	9.9
1990/1-1995/6	5.6	12.4	0.9	18.9
1995/6-2002	-22.8	12.7	1.1	-9
Poverty Gap				
1985/6-2002	-8.5	7.2	-3.7	-5
1985/6-1990/1	-4.9	-3.8	1.2	-7.5
1990/1-2002	-2.6	8.4	-3.3	2.5
1990/1-1995/6	1.8	2.9	0.8	5.4
1995/6-2002	-6.7	6.1	-2.4	-3
Squared Poverty Gap				
1985/6-2002	-3.5	3.5	-2.3	-2.3
1985/6-1990/1	-2.1	-1.6	0.6	-3.1
1990/1-2002	-0.9	3.3	-1.6	0.7
1990/1-1995/6	0.7	0.9	0.4	1.9
1995/6-2002	-2.5	2.9	-1.6	-1.2

Source: Author's calculations from LFSES and HIES data

District level changes in poverty are decomposed and results shown in Figure 4.7, Figure 4.8 and Table 4.6. In the figures, districts are given in order of the *largest overall decline in poverty over the entire period 1985/86-2002*. This ranges from a reduction of 25.5 percentage points in Anuradhapura to a 1.7 percentage point increase in Nuwara Eliya. Although there was much fluctuation *within* this period, in all districts, poverty in 2002 was lower than the initial levels in 1985/86.

In the first period, most districts exhibited the 'rural-type' pattern of growth and favourable redistribution combining to reduce poverty. The exceptions were Colombo, Kalutara, Kandy and Nuwara Eliya, where the poverty-reducing impact of growth was reduced by unfavourable redistribution. Even in districts with a substantial estate sector, such as Badulla, Matale, Kegalle and Ratnapura, redistribution was favourable during this period. A possible reason for this is that favourable agricultural yields in the 1990-91 period had a poverty reducing effect. In Hambantota, Ratnapura and Moneragala, the impact of favourable redistribution was larger than that of growth during this period, while in all other districts, the growth impact predominated.

In the second period, when poverty increased, Gampaha, Kurunegala and the North Central province districts of Anuradhapura and Polonnaruwa, in addition to Colombo and Kalutara, exhibited 'urban-type' favourable redistribution, that mitigated the poverty-increasing impact of negative consumption growth in these districts.

Among the districts that experienced both negative consumption growth and unfavourable redistribution during this period, three distinct groups are evident. In the first group, Hambantota, Galle, Puttalam and Kandy, negative growth, rather than adverse redistribution was for the most part responsible for the increase in poverty. Three of these four are coastal districts, and all four are somewhat more urbanised than the remaining districts. In the second group, i.e. Matara and Kegalle, negative growth and adverse redistribution are about equally responsible for the rise in poverty, whereas in the last group, i.e. Ratnapura, Moneragala, Matale, Nuwara Eliya and Badulla, adverse redistribution is the main contributor to the rise in poverty.

In the last period, the pattern in all districts is of positive consumption growth and adverse redistribution. Districts vary according to the relative importance of these two components. Surprisingly, the district with the lowest poverty and that with the highest poverty both indicate growth to have been key in reducing poverty, with adverse redistribution having a very small impact. It is not clear whether this is coincidental, or whether these districts shared some common phenomenon during this period. Some of the surprises in terms of adverse redistribution are Polonnaruwa, Kurunegala and Hambantota, where redistribution effects dominated the low growth in these districts. This points to the need to investigate patterns of growth and redistribution more closely in these districts in this period. Puttalam and Badulla districts were among the high-poverty districts where adverse redistribution kept poverty at high levels, while in Kegalle, Ratnapura, Nuwara Eliya, Anuradhapura, Galle and, surprisingly, Gampaha, adverse redistribution also kept improvements in poverty very low.

Table 4.6: Growth and redistribution composition of district-level changes in poverty

Period	Growth	Redistribution	Residual	Total Change in Poverty
Colombo district				
Headcount Index				
1985/6-2002	-10	4	-2.9	-9
1985/6-1990/1	-6.2	8.4	-3	-0.8
1990/1-2002	-5.4	-2.3	-0.5	-8.2
1990/1-1995/6	4.2	-5.7	0.1	-1.5
1995/6-2002	-9.4	3	-0.3	-6.7
Poverty Gap				
1985/6-2002	-2.5	1	-0.8	-2.4
1985/6-1990/1	-1.5	2.2	-0.8	-0.1
1990/1-2002	-1.7	-0.9	0.3	-2.2
1990/1-1995/6	1.1	-2	-0.3	-1.2
1995/6-2002	-1.8	1.3	-0.6	-1
Squared Poverty Gap				
1985/6-2002	-1	0.3	-0.3	-0.9
1985/6-1990/1	-0.6	0.8	-0.4	-0.1
1990/1-2002	-0.6	-0.3	0.2	-0.8
1990/1-1995/6	0.5	-0.8	-0.2	-0.6
1995/6-2002	-0.5	0.6	-0.3	-0.2
Gampaha district				
Headcount Index				
1985/6-2002	-20.1	-4.4	3	-21.5
1985/6-1990/1	-11.4	-8.6	1.4	-18.6
1990/1-2002	-7.2	5.3	-1	-2.9
1990/1-1995/6	4.9	-3.1	-0.3	1.5
1995/6-2002	-11.3	8.2	-1.3	-4.4
Poverty Gap				
1985/6-2002	-5.6	-0.8	0.6	-5.8
1985/6-1990/1	-3.2	-3.1	0.8	-5.6
1990/1-2002	-1.5	1.9	-0.6	-0.2
1990/1-1995/6	1.1	-0.7	-0.2	0.2
1995/6-2002	-2	3.1	-1.5	-0.4
Squared Poverty Gap				
1985/6-2002	-2.2	-0.3	0.2	-2.3
1985/6-1990/1	-1.3	-1.4	0.5	-2.3
1990/1-2002	-0.4	0.8	-0.4	0
1990/1-1995/6	0.4	-0.3	-0.1	0
1995/6-2002	-0.6	1.3	-0.8	0
Kalutara district				
Headcount Index				
1985/6-2002	-19.3	11.6	-1.1	-8.8
1985/6-1990/1	-9.4	12.1	-4.3	-1.7

Table 4.6: Growth and redistribution composition of district-level changes in poverty (Contd.)

Period	Growth	Redistribution	Residual	Total Change in Poverty
1990/1-2002	-11.7	3.2	1.4	-7.1
1990/1-1995/6	6.6	-2.6	-1.1	2.9
1995/6-2002	-17.2	5.9	1.4	-10
Poverty Gap				
1985/6-2002	-5.1	5	-2.6	-2.7
1985/6-1990/1	-3	3.2	-1.2	-1
1990/1-2002	-3.2	1.9	-0.4	-1.6
1990/1-1995/6	2	-0.7	-0.2	1.1
1995/6-2002	-4.7	2.9	-0.9	-2.7
Squared Poverty Gap				
1985/6-2002	-1.9	2.4	-1.6	-1.1
1985/6-1990/1	-1.2	1.1	-0.6	-0.6
1990/1-2002	-1.1	1	-0.4	-0.6
1990/1-1995/6	0.8	-0.3	-0.1	0.4
1995/6-2002	-1.7	1.5	-0.7	-1
Kandy district				
Headcount Index				
1985/6-2002	-24.9	8.6	-0.1	-16.4
1985/6-1990/1	-12.5	6	-2.9	-9.4
1990/1-2002	-13.7	6.4	0.3	-7
1990/1-1995/6	7.4	1	-2.4	6
1995/6-2002	-17.8	7.2	-2.5	-13
Poverty Gap				
1985/6-2002	-7.6	4.6	-2.1	-5
1985/6-1990/1	-4.3	1.4	-0.5	-3.4
1990/1-2002	-3.6	2.9	-0.9	-1.6
1990/1-1995/6	2.3	0.8	-0.1	3
1995/6-2002	-5.9	2.4	-1.1	-4.6
Squared Poverty Gap				
1985/6-2002	-3	2.4	-1.4	-2
1985/6-1990/1	-1.8	0.6	-0.2	-1.4
1990/1-2002	-1.3	1.3	-0.5	-0.6
1990/1-1995/6	0.9	0.5	0	1.4
1995/6-2002	-2.4	1.1	-0.6	-2
Matale district				
Headcount Index				
1985/6-2002	-26.9	15.7	0.8	-10.5
1985/6-1990/1	-14.6	-3.8	1.7	-16.7
1990/1-2002	-9.3	22.3	-6.8	6.2
1990/1-1995/6	6.3	10.6	1.5	18.4
1995/6-2002	-21.2	9.8	-0.8	-12.2
Poverty Gap				
1985/6-2002	-7.2	8.3	-4.1	-3
1985/6-1990/1	-4.3	-0.1	0.6	-3.7
1990/1-2002	-2.8	6	-2.5	0.7

Table 4.6: Growth and redistribution composition of district-level changes in poverty (Contd.)

Period	Growth	Redistribution	Residual	Total Change in Poverty
1990/1-1995/6	1.7	2.8	0.7	5.2
1995/6-2002	-6.6	3.8	-1.8	-4.6
Squared Poverty Gap				
1985/6-2002	-2.5	4	-2.7	-1.3
1985/6-1990/1	-1.6	0.4	0.1	-1.2
1990/1-2002	-1	2.2	-1.2	-0.1
1990/1-1995/6	0.7	1.1	0.3	2.2
1995/6-2002	-2.5	1.4	-1.1	-2.3
Nuwara Eliya district				
Headcount Index				
1985/6-2002	-15.2	38	-21	1.7
1985/6-1990/1	-8.8	5.3	-2.5	-5.9
1990/1-2002	-7.4	23.7	-8.6	7.6
1990/1-1995/6	4.9	8.3	5	18.1
1995/6-2002	-22.8	15.8	-3.5	-10.5
Poverty Gap				
1985/6-2002	-3.4	10.2	-6.9	-0.2
1985/6-1990/1	-2.1	1.3	-0.5	-1.3
1990/1-2002	-1.5	5.4	-2.8	1
1990/1-1995/6	1.2	0.9	0.8	2.9
1995/6-2002	-4.5	5.3	-2.7	-1.9
Squared Poverty Gap				
1985/6-2002	-1.2	3.9	-2.8	-0.1
1985/6-1990/1	-0.7	0.6	-0.2	-0.3
1990/1-2002	-0.6	1.7	-1	0.2
1990/1-1995/6	0.4	0	0.2	0.6
1995/6-2002	-1.4	2.2	-1.3	-0.5
Galle district				
Headcount Index				
1985/6-2002	-25.4	3	3	-19.4
1985/6-1990/1	-13.3	-7.2	-1.4	-21.8
1990/1-2002	-10.3	15	-2.3	2.4
1990/1-1995/6	6.6	1.6	-0.2	8.1
1995/6-2002	-18	11	1.4	-5.6
Poverty Gap				
1985/6-2002	-8.6	2.4	-1	-7.2
1985/6-1990/1	-4.8	-3.8	0.9	-7.7
1990/1-2002	-2.7	5.1	-1.8	0.5
1990/1-1995/6	1.8	0.6	0.1	2.5
1995/6-2002	-4.8	5.1	-2.3	-2
Squared Poverty Gap				
1985/6-2002	-3.6	1.3	-0.8	-3.2
1985/6-1990/1	-2.1	-1.8	0.6	-3.3
1990/1-2002	-1	2.1	-1	0.2

Table 4.6: Growth and redistribution composition of district-level changes in poverty (Contd.)

Period	Growth	Redistribution	Residual	Total Change in Poverty
1990/1-1995/6	0.7	0.3	0.1	1.1
1995/6-2002	-1.8	2.3	-1.4	-0.9
Matara district				
Headcount Index				
1985/6-2002	-22.7	12.5	0.2	-10.1
1985/6-1990/1	-13.6	-1.7	-0.1	-15.4
1990/1-2002	-10	17.9	-2.6	5.3
1990/1-1995/6	6.1	5.9	1.2	13.2
1995/6-2002	-20.8	9.5	3.5	-7.9
Poverty Gap				
1985/6-2002	-6.5	6.5	-3.4	-3.4
1985/6-1990/1	-3.8	-1.7	0.1	-5.3
1990/1-2002	-2.7	6.7	-2.1	1.9
1990/1-1995/6	1.7	1.2	0.5	3.3
1995/6-2002	-5.3	5.9	-2	-1.4
Squared Poverty Gap				
1985/6-2002	-2.8	3.1	-2.1	-1.8
1985/6-1990/1	-1.6	-1.1	0.2	-2.5
1990/1-2002	-0.9	2.9	-1.3	0.7
1990/1-1995/6	0.6	0.5	0.2	1.3
1995/6-2002	-1.9	2.9	-1.6	-0.5
Hambantota district				
Headcount Index				
1985/6-2002	-24.2	5.8	-3.3	-21.8
1985/6-1990/1	-11.2	-18.4	-1	-30.6
1990/1-2002	-11.6	25.2	-4.8	8.8
1990/1-1995/6	6.3	0.9	-0.2	6.9
1995/6-2002	-18	24.4	-4.5	1.9
Poverty Gap				
1985/6-2002	-10.5	2	-1.4	-10
1985/6-1990/1	-5.5	-9.3	1.8	-13
1990/1-2002	-2.5	8.7	-3.1	3.1
1990/1-1995/6	1.8	0	0.1	1.9
1995/6-2002	-4.8	10.1	-4.1	1.2
Squared Poverty Gap				
1985/6-2002	-5.2	0.7	-0.6	-5.1
1985/6-1990/1	-2.9	-4.8	1.5	-6.2
1990/1-2002	-0.9	3.6	-1.6	1.1
1990/1-1995/6	0.7	-0.2	0	0.5
1995/6-2002	-1.6	4.7	-2.6	0.5
Kurunegala district				
Headcount Index				
1985/6-2002	-24.8	10.9	-1.7	-15.6
1985/6-1990/1	-14	-9.4	2	-21.3
1990/1-2002	-10.4	21	-4.8	5.7

Table 4.6: Growth and redistribution composition of district-level changes in poverty (Contd.)

Period	Growth	Redistribution	Residual	Total Change in Poverty
1990/1-1995/6	6.6	-0.7	1.1	7
1995/6-2002	-16.7	20.5	-5.1	-1.2
Poverty gap				
1985/6-2002	-7.4	5.2	-2.8	-5
1985/6-1990/1	-4.2	-3.5	0.9	-6.9
1990/1-2002	-2.1	6.6	-2.6	1.9
1990/1-1995/6	1.6	0	0	1.5
1995/6-2002	-3.8	7.8	-3.7	0.4
Squared Poverty Gap				
1985/6-2002	-2.9	2.4	-1.6	-2.1
1985/6-1990/1	-1.7	-1.7	0.5	-2.8
1990/1-2002	-0.6	2.7	-1.2	0.8
1990/1-1995/6	0.5	0	0	0.5
1995/6-2002	-1.2	3.4	-2	0.3
Puttalam district				
Headcount Index				
1985/6-2002	-24.3	20.4	0.7	-3.2
1985/6-1990/1	-12.5	-2.5	0	-15
1990/1-2002	-9.4	23.3	-2	11.9
1990/1-1995/6	6.1	1.3	3.1	10.5
1995/6-2002	-20.5	19.1	2.7	1.4
Poverty Gap				
1985/6-2002	-6.4	9.9	-4.6	-1.1
1985/6-1990/1	-3.8	-0.7	0.5	-4
1990/1-2002	-2.4	8.3	-3	3
1990/1-1995/6	1.6	0	0.3	1.8
1995/6-2002	-4.3	9.4	-3.9	1.2
Squared Poverty Gap				
1985/6-2002	-2.3	5	-3.1	-0.4
1985/6-1990/1	-1.4	-0.1	0.1	-1.4
1990/1-2002	-0.8	3.5	-1.6	1.1
1990/1-1995/6	0.6	-0.1	0	0.5
1995/6-2002	-1.4	4.4	-2.4	0.5
Anuradhapura district				
Headcount Index				
1985/6-2002	-31.3	1.6	4.2	-25.5
1985/6-1990/1	-15.4	-8.2	-0.2	-23.8
1990/1-2002	-14.1	12.7	-0.3	-1.7
1990/1-1995/6	7.9	-1.5	-0.7	5.7
1995/6-2002	-19.7	13.6	-1.3	-7.4
Poverty Gap				
1985/6-2002	-8	2.1	-0.9	-6.8
1985/6-1990/1	-4.8	-3.3	0.8	-7.3
1990/1-2002	-2.3	4.4	-1.6	0.5
1990/1-1995/6	1.8	-0.4	-0.1	1.4

Table 4.6: Growth and redistribution composition of district-level changes in poverty (Contd.)

Period	Growth	Redistribution	Residual	Total Change in Poverty
1995/6-2002	-3.9	5.5	-2.5	-0.9
Squared Poverty Gap				
1985/6-2002	-2.9	1.1	-0.8	-2.6
1985/6-1990/1	-1.8	-1.6	0.6	-2.8
1990/1-2002	-0.6	1.8	-0.9	0.3
1990/1-1995/6	0.6	-0.1	-0.1	0.4
1995/6-2002	-1.1	2.4	-1.5	-0.1
Polonnaruwa district				
Headcount Index				
1985/6-2002	-21.6	18.9	-2.8	-5.5
1985/6-1990/1	-12.4	0.1	1.7	-10.6
1990/1-2002	-11.2	16.9	-0.7	5
1990/1-1995/6	6.4	-2.8	-1.9	1.7
1995/6-2002	-12.6	22.2	-6.2	3.3
Poverty Gap				
1985/6-2002	-4.8	7.8	-4.4	-1.3
1985/6-1990/1	-3	0.2	-0.3	-3
1990/1-2002	-2	5.8	-2.1	1.7
1990/1-1995/6	1.5	0.1	-0.3	1.4
1995/6-2002	-3.2	6.9	-3.3	0.4
Squared Poverty Gap				
1985/6-2002	-1.6	3.6	-2.4	-0.5
1985/6-1990/1	-1	-0.1	-0.1	-1.2
1990/1-2002	-0.6	2.4	-1.1	0.7
1990/1-1995/6	0.5	0.1	0	0.5
1995/6-2002	-1.1	3	-1.7	0.2
Badulla district				
Headcount Index				
1985/6-2002	-22.2	22	-6	-6.2
1985/6-1990/1	-10.8	-4	-4.2	-19
1990/1-2002	-12.3	29.2	-4	12.9
1990/1-1995/6	7	9.3	0.8	17.1
1995/6-2002	-21.4	17.9	-0.7	-4.2
Poverty Gap				
1985/6-2002	-8.2	8.7	-5	-4.5
1985/6-1990/1	-4.4	-4.3	0.3	-8.3
1990/1-2002	-2.9	10.3	-3.6	3.9
1990/1-1995/6	1.9	2.9	0.6	5.4
1995/6-2002	-6.5	8.4	-3.4	-1.5
Squared Poverty Gap				
1985/6-2002	-3.8	3.9	-2.6	-2.5
1985/6-1990/1	-2.2	-2.5	0.7	-4
1990/1-2002	-0.9	4.4	-1.9	1.5
1990/1-1995/6	0.7	1.1	0.3	2.1
1995/6-2002	-2.5	4	-2.1	-0.6

Table 4.6: Growth and redistribution composition of district-level changes in poverty (Contd.)

Period	Growth	Redistribution	Residual	Total Change in Poverty
Moneragala district				
Headcount Index				
1985/6-2002	-26.6	11.4	2.6	-12.6
1985/6-1990/1	-12.2	-11	-1.6	-24.8
1990/1-2002	-10.8	27.2	-4.1	12.2
1990/1-1995/6	8.3	22.7	-0.5	30.5
1995/6-2002	-24.3	2.3	3.8	-18.3
Poverty Gap				
1985/6-2002	-9.7	7.3	-2.9	-5.3
1985/6-1990/1	-5.2	-5.4	1.1	-9.6
1990/1-2002	-3	10.5	-3.3	4.2
1990/1-1995/6	2	8.2	1.2	11.4
1995/6-2002	-8.7	2.4	-0.8	-7.2
Squared Poverty Gap				
1985/6-2002	-4.4	4.1	-2.1	-2.4
1985/6-1990/1	-2.5	-2.8	0.9	-4.4
1990/1-2002	-1.1	4.9	-1.8	2.1
1990/1-1995/6	0.8	3.9	0.8	5.4
1995/6-2002	-4	1.3	-0.6	-3.4
Ratnapura district				
Headcount Index				
1985/6-2002	-28.1	12.3	-1	-16.8
1985/6-1990/1	-14.8	-16.6	2.3	-29.1
1990/1-2002	-11.8	29.8	-5.7	12.3
1990/1-1995/6	5.9	18.1	0.6	24.6
1995/6-2002	-23	11.5	-0.7	-12.2
Poverty Gap				
1985/6-2002	-9.5	6	-3.3	-6.8
1985/6-1990/1	-5.4	-6.7	1.7	-10.3
1990/1-2002	-2.4	9.6	-3.7	3.5
1990/1-1995/6	1.7	5	1	7.7
1995/6-2002	-7.5	5.3	-2	-4.2
Squared Poverty Gap				
1985/6-2002	-4.1	2.8	-1.9	-3.2
1985/6-1990/1	-2.4	-3.1	1.1	-4.4
1990/1-2002	-0.8	3.8	-1.8	1.2
1990/1-1995/6	0.6	1.7	0.6	2.9
1995/6-2002	-3	2.6	-1.3	-1.6
Kegalle district				
Headcount Index				
1985/6-2002	-24.7	17.3	0	-7.4
1985/6-1990/1	-12.4	-3.4	1.5	-14.3
1990/1-2002	-11.5	21.3	-2.8	6.9
1990/1-1995/6	5.3	5.7	1.3	12.3
1995/6-2002	-22.7	13.8	3.5	-5.4

Table 4.6: Growth and redistribution composition of district-level changes in poverty (Contd.)

Period	Growth	Redistribution	Residual	Total Change in Poverty
Poverty Gap				
1985/6-2002	-7.3	8.5	-4.1	-2.9
1985/6-1990/1	-4.4	-0.3	0.6	-4.1
1990/1-2002	-2.9	6.7	-2.7	1.2
1990/1-1995/6	1.9	0.4	0.4	2.7
1995/6-2002	-5.7	7	-2.8	-1.5
Squared Poverty Gap				
1985/6-2002	-2.8	4.2	-2.7	-1.3
1985/6-1990/1	-1.7	0.2	0.1	-1.4
1990/1-2002	-1.1	2.5	-1.3	0.1
1990/1-1995/6	0.8	-0.1	0.1	0.8
1995/6-2002	-2.1	3.3	-1.9	-0.7

Source: Author's calculations from LFSES and HIES data

Figure 4.9 and Figure 4.10 provide decompositions of poverty gap changes over the 1985-2002 period, while Figure 4.11 and Figure 4.12 do the same for the squared poverty gap. The ranking of districts is instructive - these are ranked by the overall change in the poverty gap and squared poverty gap respectively over this period, and several ranking differences may be observed when compared with Figure 4.7 and Figure 4.8. The five districts with the highest decline in headcount poverty were also the five with the highest decline in the poverty gap, although rankings within these five positions changed. The three districts with the lowest reduction in headcount poverty also had the lowest changes in poverty gap and squared poverty gap measure. Badulla district, which had the fourth lowest reduction in the percentage of poor people nevertheless had the fifth highest reduction in inequality below the poverty line. Other notable changes were Kandy and Matale which did less well in terms of poverty gap and squared poverty gap reductions, compared to their relative position in reducing headcount poverty.

While the trends in poverty gap and poverty gap squared decompositions are very similar to those in headcount poverty, there are a few notable exceptions. In the first period, in Kegalle and Matale, adverse redistribution affected inequality below the poverty line, while favourable redistribution helped reduce the percentage in poverty. Thus, it appears that the very poor in Kegalle and Matale suffered reductions in welfare during this time. In the second period, in addition to Gampaha, Kurunegala, Anuradhapura, Polonnaruwa, Colombo and Kalutara, Puttalam suffered no adverse redistribution in either the poverty gap or squared poverty gap, and Nuwara Eliya faced no increase in inequality below the poverty line due to adverse redistribution. Thus, while adverse redistribution contributed largely to the increase in the numbers of poor people and the depth of their poverty in Nuwara Eliya, it had little effect on inequality below the poverty line. This is to some extent unsurprising as there is a great deal of homogeneity in the estate sector which dominates the Nuwara Eliya district. In the third period, adverse redistribution continues to have a low impact on the other poverty measures in the Moneragala district. Colombo, Kalutara, Kandy, Matale and Ratnapura are the only other districts where positive growth dominates adverse redistribution. In many districts, the overall change in poverty gap and squared poverty gap measures indicated an increase in the depth and severity of poverty, caused mainly by adverse redistribution and low consumption growth. Thus, the inequality experienced between 1995 and 2002 was not restricted to the upper part of the distribution, but has indeed had an effect on the poor.

Figure 4.7: Decomposition of district poverty changes, 1985-2002, Headcount Index, percentage points

Source: Author's calculations from LFSES and HIES data

Figure 4.8: Decomposition of district poverty changes, 1985-2002, Headcount Index, percentage share

Source: Author's calculations from LFSES and HIES data

Figure 4.9: Decomposition of district poverty changes, 1985-2002, Poverty Gap Index, percentage points

Source: Author's calculations from LFSES and HIES data

Figure 4.10: Decomposition of district poverty changes, 1985-2002, Poverty Gap Index, percentage share

Source: Author's calculations from LFSES and HIES data

Figure 4.11: Decomposition of district poverty changes, 1985-2002, Squared Poverty Gap Index, percentage points

Source: Author's calculations from LFSES and HIES data

Figure 4.12: Decomposition of district poverty changes, 1985-2002, Squared Poverty Gap Index, percentage share

Source: Author's calculations from LFSES and HIES data

5. Poverty Profile: By household head's characteristics

5.1 Female headship

Almost 20% of the population live in households headed by females, and they form a similar share of the population in poverty. While this is an increase over previous years, poverty in female-headed households is lower, or not significantly different from, poverty in male headed households. This result should be qualified for a variety of reasons. Firstly, *de facto* female headship often escapes observation in sample surveys. Secondly, many female headed households may be nested within male headed households, as when a daughter goes back to her parental home on the death of, or separation from her spouse. However, female headed households may be legitimately seen as well or better off than male headed households if the female becomes head as a result of the husband migrating for work, or enlisting in the army.

Table 5.1: Trends in poverty by gender of head of household, 1985-2002

	Poverty Measure (%)	1985	1990	1995	2002
Male Headed Households	Headcount Index	36.1	21.02	29.8	23.09
	Poverty Gap	9.4	4.36	6.78	5.12
	Squared Poverty Gap	3.52	1.38	2.27	1.67
Female Headed Households	Headcount Index	37.34	22.37	27.96	21.47
	Poverty Gap	10.22	5.0	6.37	4.81
	Squared Poverty Gap	3.97	1.64	2.23	1.58

Source: Author's calculations from LFSES and HIES data

Table 5.2: Contribution to poverty by gender of head of household: 1985-2002

Sex	Poverty Measure (%)	1985	1990	1995	2002
Male Headed Households	Headcount Index	81.49	81.68	83.23	83.23
	Poverty Gap	80.74	80.47	83.16	83.11
	Squared Poverty Gap	80.17	79.89	82.57	82.96
Female Headed Households	Headcount Index	18.25	17.89	16.5	16.77
	Poverty Gap	19.01	18.98	16.53	16.89
	Squared Poverty Gap	19.61	19.46	17.13	17.04

Source: Author's calculations from LFSES and HIES data

5.2 Ethnicity and religion

While the Sinhalese (83%) and Buddhists (79%) comprise the largest ethnic and religious group in the country, their percentage in poverty is proportionate at 82% and 80% respectively. The fluctuation in poverty rates of Sri Lanka and Indian Tamils parallels the fluctuation in estate sector poverty.²⁸ The share of Tamils among the poor is higher in 1995 and 2002 than in the previous decade. This may be related to the increase in internal migration from the North and East to the rest of the country, as well as to poverty changes in the estate sector.

²⁸ Many Tamils residing in plantation areas identify themselves as Sri Lanka Tamils.

Table 5.3: Trends in poverty by ethnicity of head of household, 1985-2002

Ethnic group	Poverty Measure (%)	1985	1990	1995	2002
Sinhala	Headcount Index	37.17	21.2	28.98	22.33
	Poverty Gap	9.89	4.44	6.56	4.96
	Squared Poverty Gap	3.75	1.40	2.21	1.62
Sri Lanka Tamil	Headcount Index	30.51	21.72	31.94	27.21
	Poverty Gap	6.93	5.27	7.99	6.35
	Squared Poverty Gap	2.34	1.91	2.90	2.13
Indian Tamil	Headcount Index	25.68	14.23	37.34	25.62
	Poverty Gap	5.68	2.11	6.84	4.73
	Squared Poverty Gap	1.87	0.56	1.88	1.33
Sri Lanka Moor	Headcount Index	38.17	25.74	30.90	24.61
	Poverty Gap	9.86	5.75	8.03	5.85
	Squared Poverty Gap	3.79	1.99	2.96	1.97
Malay	Headcount Index	12.63	27.96	14.01	0.76
	Poverty Gap	2.68	4.58	3.52	0.60
	Squared Poverty Gap	0.85	0.88	0.98	0.47
Burgher	Headcount Index	9.17	11.47	4.47	19.38
	Poverty Gap	2.01	2.35	10.00	5.90
	Squared Poverty Gap	0.52	0.94	0.24	2.16

Source: Author's calculations from LFSES and HIES data

Table 5.4: Contribution to poverty by ethnicity of head of household, 1985-2002

Ethnic group	Poverty Measure (%)	1985	1990	1995	2002
Sinhala	Headcount Index	86.87	83.27	82.90	81.91
	Poverty Gap	87.96	82.81	82.52	81.90
	Squared Poverty Gap	88.54	81.73	82.29	81.99
Sri Lanka Tamil	Headcount Index	3.50	5.03	5.23	5.33
	Poverty Gap	3.03	5.81	5.75	5.59
	Squared Poverty Gap	2.72	6.58	6.18	5.76
Indian Tamil	Headcount Index	2.99	2.75	5.39	5.05
	Poverty Gap	2.51	1.93	4.34	4.2
	Squared Poverty Gap	2.20	1.61	3.53	3.61
Sri Lanka Moor	Headcount Index	6.12	7.56	6.07	7.5
	Poverty Gap	6.01	8.03	6.93	8.02
	Squared Poverty Gap	6.13	8.69	7.57	8.29

Table 5.4: Contribution to poverty by ethnicity of head of household, 1985-2002 (Contd.)

Malay	Headcount Index	0.11	0.7	0.12	0.01
	Poverty Gap	0.09	0.55	0.14	0.03
	Squared Poverty Gap	0.07	0.33	0.11	0.07
Borgher	Headcount Index	0.05	0.1	0.03	0.14
	Poverty Gap	0.04	0.1	0.03	0.19
	Squared Poverty Gap	0.03	0.13	0.02	0.22

Source: Author's calculations from LFSES and HIES data

Table 5.5: Trends in poverty by religion of head of household, 1985-2002

Religion	Poverty Measure (%)	1985	1990	1995	2002
Buddhist	Headcount Index	38.58	22.02	30.27	23.33
	Poverty Gap	10.28	4.67	6.92	5.20
	Squared Poverty Gap	3.90	1.49	2.34	1.70
Hindu	Headcount Index	28.73	17.23	35.94	28.02
	Poverty Gap	6.24	3.54	7.76	5.94
	Squared Poverty Gap	2.03	1.15	2.56	1.87
Muslim	Headcount Index	37.15	24.68	29.82	23.3
	Poverty Gap	9.59	5.51	7.79	5.61
	Squared Poverty Gap	3.66	1.88	2.87	1.91
Christian	Headcount Index	19.58	14.48	14.98	11.15
	Poverty Gap	5.02	2.44	2.66	2.22
	Squared Poverty Gap	1.85	0.67	0.73	0.63

Source: Author's calculations from LFSES and HIES data

Table 5.6: Contribution to poverty by religion of head of household, 1985-2002

Religion	Poverty Measure (%)	1985	1990	1995	2002
Buddhist	Headcount Index	83.81	80.27	80.46	79.89
	Poverty Gap	84.98	80.85	80.82	80.08
	Squared Poverty Gap	85.64	80.62	80.99	80.49
Hindu	Headcount Index	5.51	6.10	9.12	9.31
	Poverty Gap	4.55	5.95	8.66	8.88
	Squared Poverty Gap	3.94	6.07	8.44	8.56
Muslim	Headcount Index	6.25	7.90	6.19	7.26
	Poverty Gap	6.14	8.38	7.10	7.86
	Squared Poverty Gap	6.22	8.95	7.75	8.20
Christian	Headcount Index	4.18	5.28	3.94	3.54
	Poverty Gap	4.07	4.23	3.08	3.18
	Squared Poverty Gap	3.99	3.66	2.49	2.75

Source: Author's calculations from LFSES and HIES data

5.3 Education

A clear association between education and poverty is usually observed. The incidence, depth and severity of poverty are typically highest among the population living in households with a head with little or no education, and lowest when the head has a high level of education. The likelihood that a poor person belongs to a household whose head has not completed primary education is 55%, whereas the likelihood of such a person belonging to a household whose head has completed A/L education or more is less than 1%.²⁹

Table 5.7: Trends in poverty by educational attainment of head of household, 1985-2002

Level of educational attainment	Poverty Measure (%)	1985	1990	1995	2002
No schooling	Headcount Index	49.10	31.86	45.97	45.81
	Poverty Gap	14.00	6.83	11.15	11.71
	Squared Poverty Gap	5.45	2.18	4.00	4.25
Sub-primary	Headcount Index	47.30	27.27	39.35	34.51
	Poverty Gap	13.30	5.83	9.38	7.77
	Squared Poverty Gap	5.20	1.91	3.20	2.50
Completed primary	Headcount Index	35.30	19.94	31.58	24.41
	Poverty Gap	8.60	4.14	7.05	5.37
	Squared Poverty Gap	3.09	1.30	2.38	1.76
Completed lower secondary	Headcount Index	28.20	16.34	24.44	17.68
	Poverty Gap	6.37	3.19	5.01	3.60
	Squared Poverty Gap	2.14	0.95	1.55	1.11
Completed GCE O/L	Headcount Index	10.30	7.38	12.17	7.62
	Poverty Gap	2.21	1.53	2.35	1.45
	Squared Poverty Gap	0.73	0.48	0.74	0.43
Completed GCE A/L	Headcount Index	6.7	4.09	5.03	2.14
	Poverty Gap	1.31	1.00	1.00	0.32
	Squared Poverty Gap	0.33	0.37	0.39	0.80
Post-secondary	Headcount Index	2.86	2.49	1.48	1.95
	Poverty Gap	0.32	0.39	0.28	0.69
	Squared Poverty Gap	0.06	0.07	0.11	0.25

Source: Author's calculations from LFSES and HIES data

²⁹ Educational classification follows the International Standard Classification of Education (ISCED). For details see http://www.unesco.org/education/information/nfsunesco/doc/isced_1997.htm

Table 5.8: Contribution to poverty by educational attainment of head of household, 1985-2002

Level of educational attainment	Poverty Measure (%)	1985	1990	1995	2002
No schooling	Headcount Index	15.89	16.02	12.20	12.55
	Poverty Gap	17.19	16.31	13.00	14.43
	Squared Poverty Gap	17.80	16.33	13.82	16.05
Sub-primary	Headcount Index	43.65	45.06	42.00	41.76
	Poverty Gap	46.51	45.77	44.00	42.30
	Squared Poverty Gap	48.45	46.9	44.48	41.77
Completed primary	Headcount Index	25.84	23.05	25.13	23.33
	Poverty Gap	23.93	22.73	24.63	23.10
	Squared Poverty Gap	22.80	22.26	24.65	23.24
Completed lower secondary	Headcount Index	10.85	10.81	13.61	16.84
	Poverty Gap	9.32	10.05	12.27	15.44
	Squared Poverty Gap	8.33	9.35	11.24	14.60
Completed GCE O/L	Headcount Index	3.12	4.03	5.96	4.75
	Poverty Gap	2.53	3.97	5.06	4.05
	Squared Poverty Gap	2.23	3.87	4.69	3.73
Completed GCE A/L	Headcount Index	0.30	0.44	0.73	0.60
	Poverty Gap	0.22	0.51	0.64	0.40
	Squared Poverty Gap	0.15	0.59	0.73	0.30
Post-secondary	Headcount Index	0.11	0.14	0.09	0.17
	Poverty Gap	0.05	0.11	0.08	0.28
	Squared Poverty Gap	0.02	0.06	0.09	0.31

Source: Author's calculations from LFSES and HIES data

5.4 Employment

The incidence of poverty among the population with an unemployed household head is higher than that of the population with an employed head, or one who is not in the labour force. However, the vast majority of heads of poor households are employed.

Table 5.9: Trends in poverty by employment status of head of household, 1985-2002

Employment status	Poverty Measure	1985	1990	1995	2002
Employed	Headcount Index	36.85	21.21	30.15	23.00
	Poverty Gap	9.61	4.39	6.78	5.07
	Squared Poverty Gap	3.58	1.38	2.26	1.64
Unemployed	Headcount Index	42.89	22.13	32.83	26.10
	Poverty Gap	12.81	5.76	8.22	6.59
	Squared Poverty Gap	5.34	1.96	2.94	2.37
Not in Labour Force	Headcount Index	33.86	21.40	26.98	21.60
	Poverty Gap	9.02	4.68	6.36	4.86
	Squared Poverty Gap	3.50	1.56	2.24	1.62

Source: Author's calculations from LFSES and HIES data

Table 5.10: Contribution to poverty by employment status of head of household, 1985-2002

Employment status	Poverty Measure	1985	1990	1995	2002
Employed	Headcount Index	77.09	75.63	78.09	77.19
	Poverty Gap	76.49	74.36	77.14	76.53
	Squared Poverty Gap	75.64	73.09	76.2	75.74
Unemployed	Headcount Index	2.36	1.05	1.18	3.21
	Poverty Gap	2.67	1.30	1.30	3.65
	Squared Poverty Gap	2.96	1.38	1.37	4.03
Not in Labour Force	Headcount Index	20.31	22.88	20.40	19.59
	Poverty Gap	20.58	23.78	21.15	19.82
	Squared Poverty Gap	21.18	24.87	22.01	20.23

Source: Author's calculations from LFSES and HIES data

5.5 Industry and occupation

While over three-quarters of the poor are in households with an employed head, poverty status varies by occupation and industry of employment. The highest poverty rates are among households whose head works in the primary sector industries of agriculture and mining, with construction following.

As classification systems adopted by the DCS changed in 2001, the last columns in Table 5.11 to Table 5.14 are not strictly comparable with the previous columns.³⁰ Moreover, the HIES questionnaire also changed the manner in which occupation and industry was obtained. While all available information was used to construct categories as closely matching to those of previous years, it would be advisable to use these results as indicative of trends rather than as a strict comparison.

The incidence of poverty is highest among those whose household heads are in occupations in the primary sector (farmers) and lowest among those in the trade, transport and finance sectors. The probability that a poor person is in a household with a head whose livelihood is in the agriculture sector (a farmer) is the highest at 37%. A zero or very small probability is associated with formal sector occupations - professional, managerial, clerical and armed forces.

³⁰ The industrial and occupational classification system adopted by the DCS changed in 2001 from the 1968 ILO classifications to ISCO-88 (International Standard Classification of Occupation) and ISCI-Revision 3 (International Standard Classification of Industry).

Table 5.11: Trends in poverty by industry of employment of head of household 1985 - 2002

Industry	Poverty Measure (%)	1985	1990	1995	2002
Agriculture	Headcount Index	42.9	22.34	37.35	30.53
	Poverty Gap	11.42	4.39	8.52	6.65
	Squared Poverty Gap	4.29	1.32	2.89	2.11
Mining and quarrying	Headcount Index	45.66	30.27	52.32	39.05
	Poverty Gap	12.4	6.3	13.13	8.69
	Squared Poverty Gap	4.67	2.01	4.22	2.79
Manufacturing	Headcount Index	32.96	19.46	25.05	19.57
	Poverty Gap	8.09	4.22	4.95	3.79
	Squared Poverty Gap	2.9	1.38	1.47	1.1
Construction	Headcount Index	40.17	24.91	31.5	25.99
	Poverty Gap	10.34	5.01	6.52	5.53
	Squared Poverty Gap	3.88	1.53	2.19	1.73
Trade	Headcount Index	22.76	15.24	20.46	13.6
	Poverty Gap	4.87	3.26	4.19	2.86
	Squared Poverty Gap	1.57	1.04	1.36	0.89
Transportation	Headcount Index	17.75	10.33	13.94	12.94
	Poverty Gap	3.75	1.82	2.71	2.92
	Squared Poverty Gap	1.27	0.5	0.8	0.94
Finance	Headcount Index	12.46	7.09	4.48	9.44
	Poverty Gap	1.56	1.85	0.74	1.74
	Squared Poverty Gap	0.36	0.52	0.19	0.47
Service industries	Headcount Index	19.85	17.11	15.1	22.82
	Poverty Gap	4.6	3.75	3.53	5.64
	Squared Poverty Gap	1.61	1.25	1.21	2

Source: Author's calculations from LFSES and HIES data

Table 5.12 Contribution to poverty by industry of employment of head of household 1985 - 2002

Industry	Poverty Measure (%)	1985	1990	1995	2002
Agriculture	Headcount Index	45	38.11	40.63	36.7
	Poverty Gap	45.58	35.59	40.74	35.95
	Squared Poverty Gap	45.5	33.55	40.84	34.94
Mining and quarrying	Headcount Index	1.2	1.18	2.14	1.83
	Poverty Gap	1.24	1.17	2.36	1.83
	Squared Poverty Gap	1.24	1.16	2.25	1.8
Manufacturing	Headcount Index	7.34	6.51	6.76	7.15
	Poverty Gap	6.85	6.71	5.88	6.24
	Squared Poverty Gap	6.52	6.88	5.17	5.52

Table 5.12 Contribution to poverty by industry of employment of head of household 1985 - 2002 (Contd.)

Construction	Headcount Index	4.57	3.69	4.98	5.21
	Poverty Gap	4.48	3.53	4.53	4.98
	Squared Poverty Gap	4.47	3.37	4.51	4.78
Trade	Headcount Index	4.96	6.51	6.49	6.18
	Poverty Gap	4.04	6.61	5.84	5.85
	Squared Poverty Gap	3.46	6.62	5.62	5.58
Transportation	Headcount Index	2.08	2.28	2.03	2.32
	Poverty Gap	1.67	1.91	1.73	2.36
	Squared Poverty Gap	1.5	1.64	1.52	2.34
Finance	Headcount Index	0.33	0.26	0.16	1.75
	Poverty Gap	0.16	0.33	0.12	1.45
	Squared Poverty Gap	0.1	0.28	0.09	1.21
Service industries	Headcount Index	4.36	7.59	5.42	15.55
	Poverty Gap	3.85	7.91	5.57	17.3
	Squared Poverty Gap	3.57	8.24	5.66	18.82

Source: Author's calculations from LFSES and HIES data

Table 5.13 Trends in poverty by occupation of employment of head of household 1985 - 2002

Occupation	Poverty Measure (%)	1985	1990	1995	2002
Professional	Headcount Index	9.32	6.77	5.08	4.36
	Poverty Gap	2.21	1.17	1.18	0.65
	Squared Poverty Gap	0.82	0.32	0.38	0.13
Managerial	Headcount Index	2.5	0	3.73	0
	Poverty Gap	0.15	0	0.94	0
	Squared Poverty Gap	0.03	0	0.33	0
Clerical	Headcount Index	9.23	4.4	7.4	4.76
	Poverty Gap	1.87	0.95	1.11	0.82
	Squared Poverty Gap	0.55	0.26	0.31	0.24
Sales workers	Headcount Index	23.64	14.84	19.45	15.57
	Poverty Gap	4.95	3.15	3.99	3.04
	Squared Poverty Gap	1.58	0.99	1.29	0.85
Service workers	Headcount Index	27.61	17.82	22.94	8.03
	Poverty Gap	6.99	3.8	5.28	2.08
	Squared Poverty Gap	2.64	1.3	1.86	0.81
Farmers	Headcount Index	43.2	22.42	37.67	29.57
	Poverty Gap	11.48	4.37	8.56	6.55
	Squared Poverty Gap	4.31	1.31	2.88	2.11

Table 5.13 Trends in poverty by occupation of employment of head of household 1985 - 2002 (Contd.)

Production workers	Headcount Index	42.95	27.7	34.47	31.31
	Poverty Gap	11.45	6.12	7.82	7.22
	Squared Poverty Gap	4.32	2.02	2.58	2.4
Armed forces	Headcount Index	14.76	7.82	3.42	0
	Poverty Gap	3.06	1.27	0.34	0
	Squared Poverty Gap	0.65	0.25	0.06	0

Source: Author's calculations from LFSES and HIES data

Table 5.14 Contribution to poverty by occupation of employment of head of household 1985 - 2002

Occupation	Poverty Measure (%)	1985	1990	1995	2002
Professional	Headcount Index	0.85	0.95	0.56	1.01
	Poverty Gap	0.76	0.78	0.57	0.68
	Squared Poverty Gap	0.75	0.68	0.54	0.41
Managerial	Headcount Index	0.05	0	0.15	0
	Poverty Gap	0.01	0	0.17	0
	Squared Poverty Gap	0.01	0	0.17	0
Clerical	Headcount Index	1.08	0.72	1	0.43
	Poverty Gap	0.83	0.74	0.66	0.33
	Squared Poverty Gap	0.65	0.64	0.54	0.3
Sales workers	Headcount Index	4.59	5.93	5.82	2.55
	Poverty Gap	3.66	5.98	5.24	2.24
	Squared Poverty Gap	3.09	5.87	5	1.91
Service workers	Headcount Index	2.47	2.57	2.65	0.54
	Poverty Gap	2.38	2.6	2.68	0.63
	Squared Poverty Gap	2.39	2.78	2.8	0.75
Farmers	Headcount Index	43.47	36.69	39.68	37.67
	Poverty Gap	43.94	33.96	39.65	37.54
	Squared Poverty Gap	43.83	31.82	39.53	37.1
Production workers	Headcount Index	24.53	28.86	27.72	30.19
	Poverty Gap	24.87	30.31	27.63	31.32
	Squared Poverty Gap	24.9	31.29	26.95	31.91
Armed forces	Headcount Index	0.04	0.11	0.04	0
	Poverty Gap	0.03	0.08	0.02	0
	Squared Poverty Gap	0.02	0.05	0.01	0

Source: Author's calculations from LFSES and HIES data

6. Incomes and Poverty

We have seen thus far that poverty is associated with geographical location, and with demographic and labour market characteristics of individuals in households, proxied in this study by the household head's characteristics. In this section, information on income received by every individual in the household is used to obtain a picture of the income profile of households and how they vary by poverty status, as well as to generate poverty rates by categories of households defined by their primary source of income.

6.1 A profile of the poor by composition of household income

In this section, income data from the 2002 HIES survey is used to construct an income profile of households.

Table 6.1 gives the definition of each of fourteen sources of income, while Figure 6.1 indicates mean income from each of these sources for all households for 2002. The corresponding figures are given in the last column of Table 6.2.³¹

Wages are overwhelmingly the largest source of income for the average household in Sri Lanka. At the national level, among incomes from self-employment, non-agricultural self-employment income is a more important source of income than income from either perennial or seasonal agricultural income.

Table 6.1: Composition of household income: Definitions

Income source	Definition
Wage from main employment	Wages and salaries (including tips and bonuses) from the principal occupation
Wage from secondary employment	Wages and salaries (including tips and bonuses) from the secondary occupation
Income in kind from employer	Income in kind received from an employer
Non-agric self-employment	Non-agricultural self-employment income in all three sectors (urban, rural and estate)
Seasonal agricultural self-employment	Income from cultivation of paddy, tobacco, chillies, onions, vegetables & fruits
Perennial agricultural self-employment	Income from cultivation of tea, rubber, coconut, coffee & spices, and from meat & fish, dairy products and firewood
Rents and dividends	Property rents and interest from dividends
Other income	Cash receipts that are not property rents or dividends, pensions, remittances or transfers and income in kind that is not from the employer
Domestic remittances	Remittances & transfers within the country
Foreign remittances	Remittances & transfers from abroad
Pension	Income from pensions, disability payments & relief payments
Disability payments	Disability payments, only available separately in 2002
Food stamps	Income from food stamps/Janasaviya/Samurdhi
Value of owner occupied house	Rental value of owner occupied house

³¹ Average income is calculated over the entire sample, not over the subset of households receiving that income, i.e. zero incomes are included in the calculation. Income is spatially adjusted.

Figure 6.1: Average incomes by source, Sri Lanka, 2002

Source: Author's calculations from LFSES and HIES data

6.1.1 Sectoral differences in household income composition

Table 6.2 indicates the percentage of households receiving income from each of these sources, and the average income and income composition of the average household in each sector.³² Mean incomes are graphed in Figure 6.2, which is ordered by size of mean income, separately by sector.

The data indicates that income sources vary moderately across sectors. While the percentage of households receiving wage income is high in all three sectors, the estate sector has the highest percentage (93%) reflecting the fact that almost all households are engaged in wage labour on the plantations, and the average wage income share was as high as 73%. In the urban sector 71% of all households have at least one member working for wages, and wage incomes comprise 45% of the average urban household's income, while 66% of rural households receive wage income from an individual's main income and the wage income share of the average rural household is 43% of total income. Estate dwellers are more likely to have a secondary source of income than households in other sectors, and its contribution to household income is larger than in the rural sector which in turn is larger than in the urban sector. Rents and dividends are more important in urban households while income in kind from employers is more important among estate dwellers.

Non-farm (non-agricultural) self-employment income follows wage incomes in order of importance of earned incomes in the urban sector (29% of households receive income from this source), but this source is not unimportant in the rural sector (21% of households receive income from this source). 46% of rural households and 31% of estate households received agricultural incomes from cash crops or dairy products, meat or fish, firewood, etc. while 29% of rural households received income from cultivating paddy, vegetables and fruits etc. All

³² All means and proportions are weighted to reflect population estimates based on the HIES 2002 survey.

agricultural (non-wage) income comprised about 12% of the average rural household's income and 5% of the average estate household's income.

As many as 81% of urban households and 94% of rural households indicated a positive value of imputed rents. This signifies that they own the houses they live in. Receipts in kind and other cash receipts were also moderately important in all three sectors.

7% of urban and 5% of rural households received foreign remittances, while 5% and 4% of rural and estate households respectively received domestic remittances. This indicates that foreign employment is slightly more accessible to urban dwellers than rural dwellers, and rural dwellers than estate dwellers. Domestic remittances appear to have some significance, although their share in total income is low (approximately 1% in rural and estate sectors). While more urban households (13%) receive pensions than rural households (6%), 2% of urban and 3% of rural households receive disability and relief payments.

6.1.2 Household income composition by poverty status

Table 6.3 and Figure 6.3 reveal differences in the composition of household income by poverty status. A larger proportion of poor households received wage income than non-poor households, indicating a greater reliance of the poor on wage employment. Moreover, a greater percentage of poor households received wage income from a secondary wage-earning occupation, supporting the supposition that the poor engage in a variety of activities in order to make ends meet.

Figure 6.2: Income composition by sector, 2002

Source: Author's calculations from LFSES and HIES data

Table 6.2: Composition of household income in Sri Lanka, by sector, 2002

Income source	Urban				Rural				Estate				National			
	% rec eivi ng ^a	Average Inco me ^b	% Share c	% rec eivi ng ^a	Average Inco me ^b	% Share c	% rec eivi ng ^a	Average Inco me ^b	% Share c	% rec eivi ng ^a	Average Inco me ^b	% Share c	% rec eivi ng ^a	Average Inco me ^b	% Share c	
Wage from main employment	70.96	8,268	41.59	66.02	4,734	43.42	92.61	5,280	75.75	68.15	5,208	44.12				
Wage from secondary employment	0.52	20	0.1	0.81	20	0.18	2.3	50	0.72	0.86	22	0.18				
Income in kind from employer	17.13	242	1.22	12.08	131	1.2	60.04	169	2.43	15.44	147	1.25				
Non-agric self-employment	29.83	4,233	21.3	21.32	1,633	14.98	3.88	278	3.98	21.39	1,882	15.94				
Seasonal agricultural self-employment	2.1	22	0.11	28.66	416	3.81	16.55	145	2.09	24.65	351	2.97				
Perennial agriculture self-employment	7.33	369	1.86	46.41	978	8.97	31.2	227	3.26	40.65	859	7.28				
Rents and dividends	12	618	3.11	4.8	105	0.97	0.8	3	0.04	5.47	164	1.39				
Other income	35.37	1,258	6.33	36.51	918	8.42	21.27	458	6.57	35.5	934	7.92				
Domestic remittances	4.73	144	0.73	5.07	98	0.9	4.31	62	0.89	4.99	102	0.86				
Foreign remittances	7.46	492	2.48	4.66	222	2.03	1.52	22	0.32	4.83	244	2.07				
Pension	12.59	878	4.42	6.26	393	3.6	0.47	29	0.41	6.73	433	3.67				
Disability payments	1.89	8	0.04	2.9	13	0.12	0.58	8	0.11	2.65	12	0.1				
Food stamps	10.24	60	0.3	30.54	164	1.5	7.01	25	0.36	26.66	143	1.21				
Value of owner occupied house	80.77	3,265	16.42	94.03	1,080	9.9	49.91	213	3.06	89.87	1,304	11.05				
All	100	21,225	100	100	11,520	100	100	7,254	100	100	12,493	100				

Source: Author's calculations from LFSES and HIES data

- ^a Percentage of households receiving any income from this source.
- ^b Average income (spatially deflated rupees and cents) received from each source by the average household.
- ^c Income composition (% share of each source in total income) of the average household.

The importance of self-employment incomes to the poor depends on the type of income. Agricultural self-employment income of both categories is more important to the poor than to the non-poor in terms of percentage of households receiving this income. 29% of poor households receive income from paddy, vegetables, etc. compared to 24% of the non-poor, and 47% of the poor receive income from cash crops, dairy products, meat, fish, firewood, etc. compared to 39% of the non-poor. On the other hand, non-farm self-employment income is more important to non-poor households (23% of non-poor households receive income from this source compared to 13% of poor households).

While 2% of poor households received foreign remittances which are 0.5% of their incomes, the non-poor receive greater benefit from foreign employment with 6% of households receiving foreign remittances and an income share of almost 2%. While a larger proportion of non-poor households received pensions, a slightly higher proportion of poor households receive disability and relief payments.

Similar percentages of poor and non-poor households (90-91%) live in their own houses, while imputed rents account for about 8% of incomes for the poor and 12% of incomes for the non-poor.

As is expected, food stamps are a more importance source of income for the poor than for the non-poor, but it appears that close to half of poor households do not receive food stamps (46%), while about a quarter of the non-poor receive food stamps. This is explored further in section 6.3.

Figure 6.3: Income composition by poverty status, 2002

Table 6.3 Composition of household income in Sri Lanka, by poverty status, 2002

Income source	Poor			Non poor			National		
	% Receiving ^a	Average income ^b	% Share ^c	% Receiving ^a	Average income ^b	% Share ^c	% Receiving ^a	Average income ^b	% Share ^c
Wage from main employment	74.12	3,159	55.05	66.72	5,697	42.98	68.15	5,208	44.12
Wage from secondary employment	1.12	18	0.32	0.8	23	0.17	0.86	22	0.18
Income in kind from employer	16.12	76	1.33	15.28	164	1.24	15.44	147	1.25
Non-agric self-employment	12.96	465	8.11	23.41	2,220	16.75	21.39	1,882	15.94
Seasonal agricultural self-employment	28.45	303	5.28	23.74	362	2.73	24.65	351	2.97
Perennial agricultural self-employment	47.26	577	10.05	39.07	926	6.99	40.65	859	7.28
Rents and dividends	2.34	7	0.11	6.22	201	1.52	5.47	164	1.39
Other income	33.23	325	5.66	36.04	1,080	8.15	35.5	934	7.92
Domestic remittances	3.65	32	0.56	5.31	118	0.89	4.99	102	0.86
Foreign remittances	1.9	35	0.61	5.53	294	2.22	4.83	244	2.07
Pension	0.99	41	0.72	8.1	527	3.97	6.73	433	3.67
Disability payments	4.79	9	0.16	2.13	13	0.1	2.65	12	0.1
Food stamps	53.35	302	5.26	20.28	105	0.79	26.66	143	1.21
Value of owner occupied house	91.2	389	6.78	89.55	1,523	11.49	89.87	1,304	11.05
All	100	6,022	100	100	14,039	100	100	12,493	100

Source: Author's calculations from LFSES and HIES data

^a Percentage of households receiving any income from this source.

^b Average income (spatially deflated rupees and cents) received from each source by the average household.

^c Income composition (% share of each source in total income) of the average household.

6.2 Trends in poverty by income classification of households

Households are divided by type of income they receive, using the 14 sources listed in Table 6.1. Table 6.4 defines each household type. The first three rows refer to households that had only one source of earned income; wage (includes wage income from main and secondary occupations, and receipts in kind from an employer), agricultural self-employment income, (includes seasonal and perennial) or non-agricultural self-employment income. The fourth row contains households whose earned income is entirely from self-employment, but with a combination of agricultural and non-agricultural, and the fifth row contains households with earnings from wage incomes and self-employment incomes. The final row indicates households whose income came from none of these three sources of earned incomes.

Table 6.4 Income classification of households in Sri Lanka: Definitions

Income Classification	Definition
Wage income only	Households only earned income is wage income from main and secondary occupations, and from receipts in kind from employer
Agricultural income only	Households only earned income is agricultural income (Seasonal and and perennial)
Non -agricultural self-employment income only	Households only earned income is non-farm self-employment income
Agricultural and non-agricultural self-employment Income	Households only earned income is from self-employment (agricultural and non-agricultural)
Wage and self-employment income	Households earned income is from both wages and self-employment incomes
No earned income	Household has no income from wages, agricultural self-employment, or non-agricultural self-employment
All households	—

Classifying households in this manner reveals that there are important sectoral differences (see Table 6.5). 54% of urban households receive income only from wages, in contrast to the rural sector where only 29% of households receive wage income exclusively. In the rural and estate sectors, a larger proportion (38%) of households receive both wage income and income from self-employment. In each category mean real income is higher in the urban sector than in the rural sector, and average rural real incomes are higher than estate mean real incomes.

Table 6.6 categorises households by poverty and status and appears to indicate that the structure of income does not vary much between the poor and non-poor. For example, 34% of both poor and non-poor households depend solely on wage income. However Table 6.7 clarifies; the highest incidence of poverty (27%) is among households with agricultural self-employment income only, although only 13% of poor households come from this group. A much larger percentage (43%) of poor households receive a combination of wage and self-employment income, and the incidence of poverty among households with income from both these sources in this group is 26%. While 34% of poor households receive only wage income, the incidence of poverty among households with only wage income is the same as the national average - 23%. On the other hand, non-agricultural income earning households that do not receive wages as well have a lower association with poverty.

Table 6.5: Composition of household Income in Sri Lanka, by sector and income classification, 2002

Income Classification	Urban			Rural			Estate			National		
	Mean per capita income (Rs.)	% of house holds	Sample size	Mean per capita income (Rs.)	% of house holds	Sample size	Mean per capita income (Rs.)	% of house holds	Sample size	Mean per capita income (Rs.)	% of house holds	Sample size
Wage income only	4,870	54	1,693	3,081	29	3,434	1,801	56	634	3,319	34	5,761
Agricultural income only	4,177	2	76	2,515	14	1,972	1,410	3	31	2,530	12	2,079
Non-agricultural self-employment income only	6,105	15	499	3,576	7	785	1,874	1	8	4,209	8	1,292
Agricultural and non-agricultural self-employment income	6,071	1	31	4,346	6	825	3,354	1	7	4,375	5	863
Wage and self-employment income	6,469	18	618	3,003	38	4,807	1,872	38	491	3,155	35	5,916
No earned income	5,803	10	324	2,979	5	664	2,068	2	25	3,567	6	1,013

Source: Author's calculations from LFSES and HIES data

Table 6.6 Composition of household income in Sri Lanka, by poverty status and income classification, 2002

Income Classification	Poor			Non-poor			All		
	Mean per capita income (Rs.)	% of house holds	Sample size	Mean per capita income (Rs.)	% of house holds	Sample size	Mean per capita income (Rs.)	% of house holds	Sample size
Wage income only	1261	34	1086	3808	34	4675	3319	34	5761
Agricultural income only	1015	14	471	2956	12	1608	2530	12	2079
Non-agricultural self-employment income only	1351	3	109	4479	9	1183	4209	8	1292
Agricultural and non-agricultural self-employment income	1315	4	122	4871	6	741	4375	5	863
Wage and self employment income	1344	41	1366	3685	34	4550	3155	35	5916
No earned income	908	4	122	3955	6	891	3567	6	1013

Source: Author's calculations from LFSES and HIES data

Table 6.7 Poverty in Sri Lanka by source of household income, 2002

Household type by source of household income	Incidence of poverty		Depth of poverty		Severity of poverty	
	Index	Contribution	Index	Contribution	Index	Contribution
Wage income only	22.67	34.23	5.06	34.37	1.66	34.47
Agricultural self-employment income only	26.86	12.69	5.74	12.19	1.80	11.74
Non-agricultural self-employment income only	10.48	3.47	2.04	3.03	0.58	2.63
Agricultural and non-agricultural self-employment income only	16.72	4.13	3.31	3.68	0.99	3.37
Wage and self-employment income	25.93	42.96	5.85	43.56	1.92	43.94
No earned income	14.88	2.52	4.14	3.16	1.65	3.85

Source: Author's calculations from LFSES and HIES data

Table 6.8 Mean consumption expenditure and inequality of consumption expenditure by source of household income

Household type by source of household income	Sample size	Population share	Average consumption expenditure
Wage income only	5,761	34	3,172
Agricultural self-employment income only	2,079	11	2,552
Non-agricultural self-employment income only	1,292	8	3,812
Agricultural and non-agricultural self-employment income only	863	6	3,335
Wage and self-employment income	5,916	38	2,815
No earned income	1,013	4	3,963

Source: Author's calculations from LFSES and HIES data

Figure 6.4: Poverty by income category, 1985-2002

Source: Author's calculations from LFSES and HIES data

Table 6.9: Poverty by income category

Income Category	Poverty measure	1985	1990	1995	2002
Wages only	Headcount Index	35.36	22.31	29.27	22.67
	Poverty Gap	9.66	5.04	6.68	5.06
	Squared Poverty Gap	3.7	1.71	2.27	1.66
Agricultural self-employment only	Headcount Index	33.9	18.03	29.53	26.86
	Poverty Gap	8.4	3.52	6.71	5.74
	Squared Poverty Gap	3.14	1.05	2.17	1.8
Non agricultural self-employment only	Headcount Index	24.84	16.99	16.99	10.48
	Poverty Gap	6	3.68	3.83	2.04
	Squared Poverty Gap	2.28	1.22	1.34	0.58
Both agric and non-agric self-employment	Headcount Index	32.74	14.94	25.8	16.72
	Poverty Gap	8.33	2.68	5.26	3.31
	Squared Poverty Gap	3.12	0.78	1.61	0.99
Wages and self-employment	Headcount Index	39.11	23.44	32.41	25.93
	Poverty Gap	10.33	4.83	7.39	5.85
	Squared Poverty Gap	3.87	1.49	2.51	1.92
Non-labour income	Headcount Index	28	17.28	20.66	14.88
	Poverty Gap	7.39	4.25	5.5	4.14
	Squared Poverty Gap	2.85	1.68	2.11	1.65

Source: Author's calculations from LFSES and HIES data

Poverty incidence by income category for all four periods is shown in Figure 6.4 which illustrates the numbers in Table 6.9. In each year, the incidence of poverty has been highest among households whose income is a combination of wage and self-employment income. The second highest incidence of poverty in the first two periods is among households with only wage income, but in the third and last periods it is among households with only agricultural self-employment. Households engaged only in non-agricultural self-employment had the lowest incidence of poverty (except in 1990-1, when the incidence among households with both agricultural and non-agricultural self-employment income was lowest) which has been declining steadily over time. The smallest decline in poverty incidence in 2002 from 1995-6 levels was also observed among households with only agricultural self-employment incomes.

Table 6.10 and Figure 6.5 illustrate the contribution to poverty by income group. That the share of households with only wage income has steadily risen over the period while the share of households with wage and self-employment income has steadily declined is clearly illustrated in Figure 6.5. These trends are similar for the contribution to poverty of the poverty gap and the squared poverty gap as well.

Figure 6.5: Contribution to poverty by income group

Headcount

(a)

Poverty Gap

(b)

Figure 6.5: Contribution to poverty by income group (Contd.)

Squared Poverty Gap

(c)

Source: Author's calculations from LFSES and HIES data

Table 6.10: Contribution to Poverty by Income Category

Income Category	Poverty measure	1985	1990	1995	2002
Wages only	Headcount Index	21.93	28.58	29.41	34.23
	Poverty Gap	22.79	30.71	29.51	34.37
	Squared Poverty Gap	23.2	32.5	29.68	34.47
Agricultural self-employment only	Headcount Index	12.07	11.35	12.04	12.69
	Poverty Gap	11.38	10.53	12.02	12.19
	Squared Poverty Gap	11.29	9.85	11.53	11.74
Non agricultural self-employment only	Headcount Index	2.79	4.23	3.38	3.47
	Poverty Gap	2.56	4.36	3.34	3.03
	Squared Poverty Gap	2.58	4.52	3.47	2.63
Both agric and non-agric self-employment	Headcount Index	6.22	5.19	5.08	4.13
	Poverty Gap	6.03	4.42	4.55	3.68
	Squared Poverty Gap	5.98	4.02	4.13	3.37
Wages and self-employment	Headcount Index	55.17	48.47	47.77	42.96
	Poverty Gap	55.42	47.42	47.86	43.56
	Squared Poverty Gap	55.09	45.96	48.12	43.94

Table 6.10: Contribution to Poverty by Income Category (Contd.)

Non-labour income	Headcount Index	1.81	2.18	2.31	2.52
	Poverty Gap	1.82	2.55	2.7	3.16
	Squared Poverty Gap	1.86	3.15	3.07	3.85

Source: Author's calculations from LFSES and HIES data

6.3 Distribution of transfer income

In this section, the distribution of particular types of public and private transfers among households ranked into deciles by per capita consumption is examined in greater detail. The first two income sources are public transfers - welfare benefit payments and disability and relief payments - while the third, a form of private transfers, is overseas remittances.

6.3.1 Distribution of disability and relief payments

In household surveys prior to 2002, disability and relief payments were nested in a larger category together with pensions, making a separate analysis of these payments impossible. However, in HIES 2002 information started to be recorded separately on the amount received as disability or relief payment. Thus, it is not possible to compare changes in disability payments with previous years for this reason. Nevertheless, the information from HIES 2002 proves to be instructive and worth presenting.

A large percentage (91%) of transfer payments to households made by the Social Welfare Ministry (SWM) in 2002 were disability payments to disabled soldiers or social security to families of soldiers who lost their lives while in service. The latter payments continue until the year of retirement of the soldier who lost his/her life (CEPA 2004). Flood and drought relief payments in 2002 were approximately 7% of SWM transfers to households.³³

Whether the 'disability and relief payments' referred to in the HIES questionnaire schedule reflect only relief payments or whether they include payments to disabled soldiers and/or social security to families of soldiers who have lost their lives is not known. Table 6.2 indicates that 2.65% of all households outside the North and East received these payments.

What is evident from Figure 6.6 is that the distribution of disability and relief payments is in general progressive, with the average of 3% of households being distributed from 6% of households in the lowest decile to less than 2% among the top four deciles.

If these payments were mainly (disaster) relief payments, and *if* the distribution of payments were an indication of the distribution of households affected by disasters, this would indicate that poorer households were more vulnerable than richer households.³⁴

On the other hand, if the distribution of disability and relief payments were more a reflection of the distribution of payments to soldiers or their families, Figure 6.6 could be taken as evidence that employment in the armed forces is greater among poorer households. This would provide some support for the argument that recruitment into the armed forces has a poverty reducing effect.

³³ Data from CEPA 2004.

³⁴ Note that this conclusion is at best indicative, depending as it does on two conditions about which there is no information available.

Figure 6.6: Distribution of disability and relief payments, 2002

Source: Author's calculations from LFSES and HIES data

Table 6.11 Distribution of disability and relief payments

Decile	Lowest	2	3	4	5	6	7	8	9	Highest
Percentage	5.97	4.17	3.83	4.12	2.59	3.07	1.56	1.23	1.00	0.76

Source: Author's calculations from LFSES and HIES data

6.3.2 Distribution of welfare benefits

In this section, the distribution of welfare benefits is examined over the 1985 to 2002 period. The benefit is mainly in terms of the value of food stamps, while the related programme has changed over the period, from *Janasaviya* in 1985-6 and 1990-91 to *Samurdhi* after 1995.

In 2002, the percentage of households that receive welfare benefit (food stamps) payments is highest (31 percent) in the rural sector, reflecting the high proportion of rural poor, followed by the urban (10 percent) and estate (7 percent) sectors (Table 6.2). As noted already, Table 6.3 indicates that only 53% of poor households receive welfare benefits, implying that 47% of them do not, while 21% of non-poor households do receive these benefits, indicating a problem of mis-targeting of both type I and type II errors.

Figure 6.7 graphs the percentage of households receiving benefits, and the income share of benefits, against deciles of population (ranked by per capita consumption). The graphs clearly indicate that the distribution of welfare benefits is progressive, with a higher coverage of benefits to the lower part of the distribution and a lower coverage of the upper part of the distribution.³⁵

³⁵ Government spending in 1995 on Janasaviya and Samurdhi were Rs.2.8 billion and Rs.2.33 billion respectively. Government spending on food stamps was a little over a billion rupees, and on kerosene, Rs.437 million, and Rs.34 million on infant milk food subsidy (Gunatilaka *et al.* 1997). The estimated allocation for Samurdhi relief and infant milk subsidy was Rs.12 billion (CEPA 2004).

Figure 6.7: Distribution of welfare benefits payments (food stamps)

Source: Author's calculations from LFSES and HIES data

Table 6.12 provides the percentages of households receiving food stamps for each period. While the overall percentage of households receiving food stamps has declined in 2002 from 1995-6 levels, the progressiveness of the distribution has improved. In the lower deciles, the percentage of households has declined by 25%, while in the upper deciles it has declined by 50%. However, there is still considerable leakage, and substantial proportions of poor households in the lowest three deciles do not receive these benefits.

Table 6.12: Distribution of Food Stamps, percentage of households receiving

Decile	1985	1990	1995	2002
Lowest	80.86	76.12	74.71	57.92
2	76.50	68.96	64.84	51.50
3	69.78	63.03	57.68	42.73
4	63.06	60.84	51.71	36.02
5	54.75	54.44	47.70	31.09
6	47.74	48.95	39.59	24.90
7	37.42	43.21	34.24	19.33
8	32.34	35.83	25.76	12.67
9	19.44	27.91	14.64	7.19
Highest	8.77	15.31	8.01	3.70

Source: Author's calculations from LFSES and HIES data

6.3.3 Distribution of foreign remittances

There is a perception that migrant labour overseas, especially women who migrate as domestic workers, is predominantly from the lower income groups of the population. In which case, one might expect that foreign remittances would be largely progressive. However, the evidence in Table 6.13 and Figure 6.8 indicate that this is not the case. The percentage of households receiving remittances, and their income share, increase with consumption.

Figure 6.8: Distribution of foreign remittances

Source: Author's calculations from LFSES and HIES data

Table 6.13: Distribution of foreign remittances, percentage of households receiving

Decile	1985	1990	1995	2002
Lowest	0.88	2.48	2.30	1.25
2	1.09	2.05	2.41	2.33
3	2.04	2.63	2.56	2.77
4	2.13	1.87	3.28	2.73
5	3.41	2.79	2.97	3.77
6	3.38	3.82	5.51	5.14
7	3.97	3.72	5.61	5.36
8	5.89	4.64	6.42	5.90
9	6.06	5.12	7.41	7.00
Highest	7.81	6.68	7.99	9.30

Source: Author's calculations from LFSES and HIES data

In conclusion, the empirical evidence supports several commonly held beliefs about the income structure of poor and rural households. It also sheds light on areas where less was known. Rural and poor households tend to diversify income earning activities. Almost half of households in rural areas receive both wage income and income from self-employment. The rural poor are (most likely agricultural) wage earners who supplement their income with income from agricultural activities. Poor, and rural households do receive income from foreign remittances, but not as much as do urban and non-poor households. Despite this difference, *domestic* remittances are moderately important in the incomes of households in rural and estate sectors. Janasaviya and Samurdhi benefits are generally well distributed, but over one third of the poor do not receive any benefits, and a little over a quarter of the non-poor receive benefits.

7. The Official Poverty Line as a Relative Poverty Line

The official poverty line derived for Sri Lanka is an absolute poverty line, derived using the cost of basic needs method. However, it has recently been suggested that a relative notion of poverty is also important in Sri Lanka (Abeyratne and Tabor 2001). It is in this context that this study undertakes the following exercise to 'locate' a relative poverty line for Sri Lanka.

Arguments in favour of a relative poverty line focus on the advantage that it automatically updates for improvements in living standards in situations where living standards rise slowly and steadily over time. Whether the latter situation exists in Sri Lanka is debatable. Nevertheless, an examination of consumption poverty using 'simulations' of relative poverty lines is likely to be instructive.

In practice, a 'good' relative poverty line is *not* simply a fixed proportion of the population (i.e. the cut-off at the poorest 40%), rather it is a fixed proportion of a measure of central tendency, such as the mean or median. Two examples are those formerly and currently used by the European Union. The previous poverty line used half of mean adjusted income, but this was abandoned in favour of 60% of median adjusted income in 2002.³⁶

A good place to start determining a relative poverty line for Sri Lanka is the official (absolute) poverty line. This is converted to a 'relative' poverty line, by calculating, for example, the median consumption level (50% of the population consume below this amount) for the population in 2002 using the HIES data and calculating what fraction of this is the official poverty line.³⁷ Median consumption expenditure for 2002 was Rs.2,154.71. The official poverty line at Rs.1,423 is 66% of the median.³⁸ Relative poverty lines that are 66% of the median in each respective year are then constructed for the years 1985/86-1990/91 (see RELATIVE1, 4th row in Table 7.1 below).

Table 7.1 Absolute and relative poverty lines and median consumption, 1985-2002 (at current prices in SL Rs.)

Poverty lines/consumption	1985-86	1990-91	1995-96	2002
Absolute	261	475	833	1423
Median consumption	313	682	1081	2155
Absolute as a% of median	83.4	69.6	77.0	66.0
RELATIVE1 (66%)	207	451	714	1423
RELATIVE2 (75%)	450	512	811	1616
Ratio of A/R1	1.26	1.05	1.17	1

Source: Author's calculations from LFSES and HIES data

³⁶ The reason for this was that the median is less sensitive to changes in consumption, especially that of very rich people. However, the problem with using a relative poverty line that is some fraction (<1) of the median, in developing countries, where absolute poverty levels can and do fluctuate is that the upper limit of relative poverty by definition will never exceed 50%.

³⁷ The measure that is used is population weighted consumption expenditure adjusted for differences in prices between districts.

³⁸ $1423/2154.71=0.66$. Coincidentally, this is the same definition used by the World Bank to measure relative poverty in Ghana (World Bank 1995b), the only instance that this author could find of a relative poverty line defined in this manner (as % of median) for a developing country.

These relative poverty lines (RELATIVE1) are lower than the absolute poverty lines for all 3 years before 2002. This is not by design, but reflects the fact that living standards in 2002 were an improvement over the previous years. In those years, the absolute poverty line (the level at which minimum basic needs are met) was higher than 66% of median income. The smallest difference between the two is observed in 1990/91 when absolute poverty levels were the lowest (at 27%) and the largest difference in 1985/86 when they were highest (at 36%). Thus, had a relative poverty line fixed at 66% of median consumption (the level of the official poverty line in 2002) been used to measure poverty prior to 2002, this would have underestimated poverty, as is shown below. Table 7.2 shows that every measure of poverty estimated using RELATIVE1 is lower than those based on the absolute poverty line.

Table 7.2: National FGT poverty measures, using absolute and relative poverty lines, 1985-2002

Poverty measures	1985-86			1990-91			1995-96			2002		
	H	PG	PG2	H	PG	PG2	H	PG	PG2	H	PG	PG2
Absolute	36	10	4	21	4	1	29	7	2	23	5	2
RELATIVE1 (66%)	20	5	1	18	4	1	19	4	1	23	5	2
RELATIVE2 (75%)	29	7	2	26	6	2	27	6	2	31	8	3

Source: Author's calculations from LFSES and HIES data

Note: H - Headcount Index, PG - Poverty Gap Index, PG2 - Squared Poverty Gap Index

Clearly, a poverty line higher than 66% of median income is needed, unless one can safely assume that living standards are going to improve steadily beyond 2002 levels. An appropriate step at this point would be to use a higher fraction of the median, say the average of the fractions indicated in the third row of Table 7.1 (Absolute as a % of the median). This is 74%. The definition of 75% of median consumption is used instead for convenience. Current values of poverty lines under this definition are given in the 5th row of Table 7.1 and results are given in the last row of Table 7.2.

If we compare results for 1995/96, where the values of absolute and relative definitions of the poverty lines are quite close, with the results for 2002, we see that with an absolute definition of poverty, the measures of poverty have improved, but if one uses the relative definition, taking into account the overall improvement in living standards between these years, relative poverty has increased.

These results are helpful in understanding the benefits and limitations of a relative definition of poverty. The benefit is that the relative poverty line, which by definition is not kept constant or absolute, but is allowed to improve with rising living standards (and fall with falling living standards), prevents a country from getting too complacent about small improvements in its poverty situation. In Sri Lanka, absolute poverty levels have declined between 1996 and 2002, but using a relative poverty line close to the absolute value of the poverty line in 1996 shows that relative poverty has actually increased. However, the limitations or disadvantages of the relative poverty line are also immediately apparent when one considers that the relative definition of poverty underestimated poverty significantly in 1985/86.³⁹ This underscores the notion that for countries where absolute poverty is still largely prevalent, a relative poverty line should be used in conjunction with, and not instead of, an absolute poverty line.

³⁹ See also footnote 36

8. Summary and Conclusion

This analysis of the most recent Household Survey data shows that poverty in Sri Lanka has declined over the last 20 years, but the decline has neither been large, nor steady. In fact, a relative definition of poverty based on a value close to the absolute value of the poverty line in 1995/96 would indicate that poverty has risen. The sustained decline in poverty was largely in urban areas, particularly in the relatively affluent Western province. Within this province too, a continuous decline in poverty was observed only in the Colombo district.

Poverty in rural and estate areas fluctuated over this period, with 1990-91 showing the most convergence among poverty levels in provinces and districts. Despite some fluctuation over the period, the relative regional distribution of poverty *at the end of the 17 year period* appears to have changed little from its initial picture; the Western province has the lowest level of poverty, the next cluster of provinces with moderate poverty comprises the Central, North Central and North Western provinces, and the highest poverty was observed in the Southern, Sabaragamuwa and Uva provinces. However, during this period, striking reductions in poverty were observed in the North Central province and Southern province.

The study showed that trends in absolute numbers or contribution to poverty moved parallel to trends in incidence, with the situation in the least poor province (Western) improving, and the situation in the poorest province (Uva), deteriorating. At the beginning of the period, one in five persons in the former, and one in ten persons in the latter, was poor. By the end of the period, these numbers had converged with a 15% contribution to poverty by the more populous Western province, and a 12% contribution to poverty by the sparsely populated Uva province.

Similarly, trends in poverty and contribution to poverty moved parallel among all three measures of poverty, except in the estate areas where there is less inequality below the poverty line. Thus, the depth and severity of poverty are generally greatest where the incidence of poverty is highest.

Decompositions of poverty changes highlighted the importance of both growth and redistribution, depending on the period under consideration. Decompositions at the disaggregated level indicated that adverse redistribution, especially in the last period, was not simply between districts, but also occurred within districts. Adverse redistribution and low consumption growth led to increases in the depth and severity of poverty, indicating that the inequality experienced in the last period was not limited to the upper part of the distribution but had an effect on the poor.

Simulation exercises with different growth rates indicated the potential of growth to reduce poverty reduction. However, the high inequality experienced in the last period (1995/96-2002) indicated that the predictive power of these simulations is limited in the face of changing distribution, especially around and below the poverty line.

Occupational and income profiles of the poor indicated that poverty was associated more strongly with households whose head was engaged in agriculture, and least associated with households with only non-agricultural sources of income. Trends in poverty over the 17 year period indicate that the least decline in poverty was experienced by households with only agricultural income or a combination of agricultural and wage income.

The situation of female headed households, and households headed by those with low or moderate educational attainment has also worsened over the period, while poverty rates disaggregated by ethnicity and race have not changed very much. The latter may be due to the fact that the analysis is restricted to the seven districts outside the North Eastern province.

A 'quick and dirty' simulation exercise with relative poverty lines suggests that an appropriate relative poverty line for Sri Lanka is that of 75% of median income. This is close to the value of the absolute poverty line in 1995/96. The exercise also demonstrated that relative poverty lines will always overstate the extent of poverty (relative to absolute poverty) during periods of rising (overall) living standards and will always understate the extent of poverty during periods of falling living standards. Thus, they should be used in conjunction with, rather than instead of, absolute poverty lines.

While the lesson from the regional patterns in poverty reduction appears to be that economic growth is essential for poverty to decline (as in the Western province), this growth will need to occur in the outlying provinces and in the agricultural sector in order for it to have an impact on poverty. Alternatively, sufficient alternatives away from agriculture need to be developed in order to enable the vast majority of the rural poor to escape poverty, especially in periods of low growth. Analysis of the distribution of welfare benefits, disability and relief payments and remittances indicated that the role of transfers - and by inference, of public and private redistribution mechanisms - in reducing poverty is limited.

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