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SRI LANKA POVERTY UPDATE

Background report
to Sri Lanka
Poverty Assessment



WORLD BANK GROUP

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Poverty Assessment

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Abbreviations

DCS	Department of Census and Statistics
DHS	Demographic and Health Survey
FBR	Family Background Report
FOB	free on board
GDP	gross domestic product
HIES	Household Income and Expenditure Survey
PPP	purchasing power parity
WHO	World Health Organization

All dollar amounts are US dollars unless otherwise indicated.

Executive summary

Sri Lanka has made strong progress in reducing poverty and sharing prosperity among the less well-off in recent years. The poverty rate using the World Bank's \$3.20 poverty line (in 2011 purchasing power parity) declined from 16.2 percent in 2012/13 to 11 percent in 2016, a reduction that compares favorably to regional peers. Extreme poverty is almost eliminated. Gains were also made in nonmonetary measures of welfare, including access to basic services, housing conditions, and asset ownership. Growth was inclusive but less pro-poor: per capita consumption growth of the bottom 40 percent of the consumption distribution accelerated to an annualized 4.2 percent but was still below the population average of 4.7 percent between 2012/13 and 2016.

A significant increase in labor income, particularly from nonfarm sectors, is the major factor behind progress. The economy is steadily transitioning toward industry and services, and sectors such as construction and trade led job creation in recent years. Wage growth has also been strong. The expansion in services was underpinned by a booming tourism sector, as tourist arrivals quadrupled between 2009 and 2016. Real gross domestic product (GDP) growth was mainly driven by gains in labor productivity, though most of the productivity growth came from increases in within-sector productivity rather than from reallocation effects. This implies that most of the labor movement occurred from agriculture toward other sectors with low productivity. Agriculture did not contribute to poverty reduction as it had in the previous decade because stagnating productivity and a reversal of favorable prices slowed agricultural income growth.

Meanwhile, the role of Samurdhi and other social assistance programs for poverty reduction was modest. Despite a significant expansion of the program in 2015, the targeting performance of Samurdhi is relatively weak, with only about 40 percent of the \$3.20 poor receiving assistance. This means that a large share of these public resources is directed to the nonpoor, limiting the program's effectiveness in reducing poverty. Given Sri Lanka's aging demographic profile, large informal sector, and limited availability of income support for the elderly, old-age poverty is expected to become more relevant over time. Migration has been an important survival strategy for some poor households, but this could change in response to institutional and structural changes that have affected the number and composition of migrants in recent years, and in response to the COVID-19 crisis.

The report concludes by pointing to a few key areas that are crucial for sustaining poverty reduction and shared prosperity:

- The creation of more and better jobs is a key priority. Accelerating growth and poverty reduction needs to rely on productivity and employment growth that can support broad-based income growth. Sustaining productivity growth will be important, especially given that progress has slowed in recent years. Accelerating labor reallocation—for example through reducing barriers to internal migration—would also help, as would creating a policy environment that promotes competitiveness and job creation. Impediments to transitioning to nonfarm activities need to be better understood.
- Measures to increase agricultural productivity will help reduce poverty. Agricultural households have a higher poverty rate due to low productivity and low earnings in the sector. Support to increase paddy productivity and help farmers shift to higher-value crops can help improve rural livelihoods and reduce poverty.
- Stronger safety nets are needed to protect the poor and vulnerable. Social protection programs could be better targeted to further reduce poverty. Only a small share of estate households is covered, even though the poverty rate is much higher in this sector. Benefit levels remain inadequate. Efforts to build better targeting and delivery systems and strengthen graduation programs can go a long way toward supporting the poor and most vulnerable.
- Narrowing the gap in access to basic services will help achieve equal opportunities for all. Sri Lanka has made great progress in closing the gaps in access to services, but large challenges remain in some areas, such as access to water supply. Spatial disparities are high—between urban and rural areas, and between the Western Province and the rest of the country—and contribute to inequality. While Sri Lanka has historically excelled in human capital outcomes, the gap between the poor and nonpoor is wide, and tertiary educational attainment is very low. Efforts are needed to improve conditions in the estate sector, where poverty continues to be much higher, and educational and nutritional outcomes much lower, than in the rest of the country.



1

Introduction

Sri Lanka has made strong progress in reducing poverty and sharing prosperity among the less well-off in recent years. Strong post-conflict recovery and growth helped establish Sri Lanka as a solid middle-income country. Progress is reflected in the continued pace of poverty reduction: the poverty rate (using the \$3.20 poverty line) declined from 16.2 percent in 2012/13 to 11 percent in 2016. A significant increase in labor income, particularly from nonfarm sectors, is the major factor behind progress. Gains were also made in access to basic services, housing conditions, and asset ownership. Large improvements were observed in electricity coverage, which is now almost universal. Unless noted otherwise, the report defines poverty according to the World Bank's international poverty line at \$3.20 per person per day (in 2011 purchasing power parity, PPP), which is the relevant line for lower-middle-income countries according to the World Bank's classification.

While Sri Lanka has historically excelled in human development outcomes and continues to make improvements, large gaps remain in some areas, such as access to higher levels of education and access to water supply and sanitation. Rural households experienced fast progress in monetary and nonmonetary welfare. However, regional disparities are high, and progress was particularly slow among the estate sector population, which continues to be one of the most marginalized groups as measured by poverty, human development outcomes, and access to services and economic opportunities.

The aim of this report is to provide an update on progress in poverty and welfare in Sri Lanka through 2016.¹ Results from extensive analysis drawing on the Household Income and Expenditure Survey (HIES) 2016 and other secondary sources are presented.² The 2016 HIES is the latest available household survey to date; while new HIES data were collected in 2019, the results have not been made public yet. The report documents areas where important and meaningful progress occurred, analyzes the driving forces behind such positive developments, and highlights remaining challenges where further improvements are needed.

COVID-19 has exerted a significant impact on the economy and its people. Gross domestic product (GDP) is estimated to have contracted by 3.6 percent in 2020, despite swift measures implemented by the government to contain the outbreak. Widespread jobs and earnings losses led to a significant increase in poverty, from an estimated 9.2 percent in 2019 to 11.7 percent in 2020, based on the \$3.20 poverty line. The impacts of COVID-19 on livelihoods and poverty are described in more detail in a separate report (World Bank, forthcoming).

1. The last such update was published in 2016, and the analyses used data from 2012/13; see Newhouse, Suarez-Becerra, and Doan (2016).

2. The HIES is conducted by the Department of Census and Statistics (DCS); annual surveys can be found on the DCS website at <http://www.statistics.gov.lk/page.asp?page=Income%20and%20Expenditure>.

The rest of this report is structured as follows. Section 2 provides in-depth documentation of progress in poverty reduction and shared prosperity. Section 3 investigates the drivers behind changes in labor and nonlabor income that are associated with the observed changes in poverty. Section 4 summarizes the key messages and priorities for policy action.



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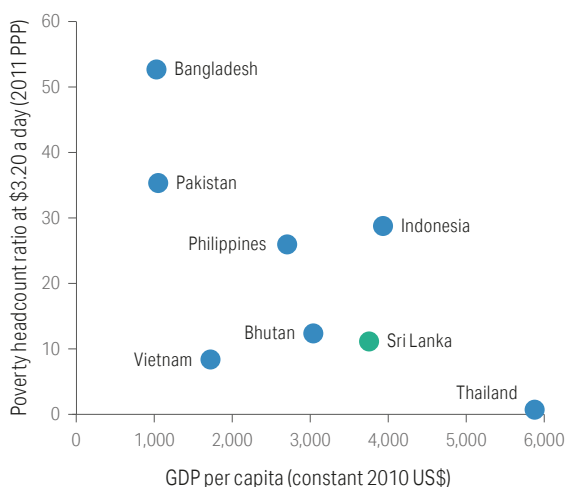
Recent trends in poverty reduction and shared prosperity

Progress in reducing poverty and inequality and in sharing prosperity

Poverty declined strongly between 2012/13 and 2016, continuing progress from previous years.³

Poverty estimates based on the World Bank's poverty line for lower-middle-income countries (at \$3.20 per person per day in 2011 PPP) dropped from 16.2 percent in 2012/13 to 11 percent in 2016.⁴ This was a further decline from 2009/10, when the poverty rate was 19.9 percent. Sri Lanka's poverty rate at \$3.20 per day compares relatively favorably to regional peers in South and Southeast Asia for which poverty estimates were available around 2016 (figure 1). Moreover, extreme poverty has been almost eliminated, with only 0.9 percent of the population living on less than \$1.90 per person per day (figure 2, panel a). This is a remarkable achievement.⁵

FIGURE 1 \$3.20 poverty rate in Sri Lanka vs. peer countries



Sources: World Development Indicators database; World Bank PovcalNet, <http://iresearch.worldbank.org/PovcalNet/home.aspx>. Note: PPP = purchasing power parity.

BOX 1 Sri Lanka's National Poverty Line

Sri Lanka's current national poverty line was established in 2002, benchmarked on consumption patterns that prevailed almost two decades ago. The national poverty line was set at Rs 1,423 per person per month in 2002 and has been inflated using the Colombo Consumer Price Index (CCPI) since then. The poverty line was derived based on the cost of basic needs method. Using this poverty line, the poverty headcount rate in Sri Lanka fell from 22.7 percent in 2002 to 4.1 percent in 2016. During this time, Sri Lanka saw strong economic growth, with GDP per capita doubling between 2002 and 2016.

Sri Lanka has the oldest poverty line in the South Asia region. The steady fall in the poverty headcount rate since 2002 reflects broad-based progress in welfare. In line with improved living standards, the share of expenditure on food has fallen, from 44.5 percent in 2002 to 34.8 percent in 2016. The consumption behaviors of the reference group are increasingly more consistent with a higher

3. The years 2009/10, 2012/13, and 2016 referenced in this report correspond to the years the HIES data were collected.

4. Starting with the HIES 2009/10, the entire Eastern Province was covered; but Mannar, Kilinochchi, and Mullaitivu in the Northern Province continued to be excluded in the same survey year. Not until the 2012/13 survey did HIES coverage extend to all 25 districts and become truly nationally representative. Because the Northern Province accounts for only a small fraction of Sri Lanka's population, the exclusion of the three districts in 2009/10 does not have a significant effect on national-level estimates.

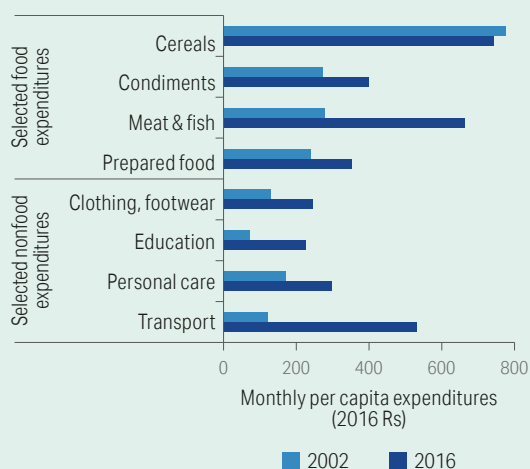
5. Using Sri Lanka's national poverty line, the poverty headcount rate fell from 8.9 percent in 2009/10 to 6.7 percent in 2012/13, and then further to 4.1 percent in 2016. However, the official national poverty line was estimated in 2002 and is now too low to represent an acceptable minimum standard of living (see box 1 for details). For this reason, the analysis in this report is made in reference to the World Bank's \$3.20 poverty line unless specified otherwise.

standard of living, greater dietary diversity, and urban living: they include a decrease in cereals consumption, an increase in consumption of meat and fish and prepared foods, and greater spending on nonfood consumption such as clothing and transport (see figure below). Most countries respond to welfare progress over time by periodically revising their poverty line, both to reflect changing consumption patterns as living standards rise and to redefine the basic standard of living for the poor.

The current low poverty line does not adequately represent a minimum acceptable standard of living for the poor, and a revision of the national poverty line is needed. The poverty line in 2016 was Rs 4,166 per person per month, or Rs 137 per person per day. To put this number in perspective, a family of four with one breadwinner who makes only Rs 20,000 per month is unlikely to be considered poor according to the national poverty line. By holding the benchmark food basket unchanged since 2002, the line has become less relevant as a way of identifying the poor, understanding their well-being, and designing pro-poor welfare programs. The HIES 2019 provides an opportunity to revise the poverty line.

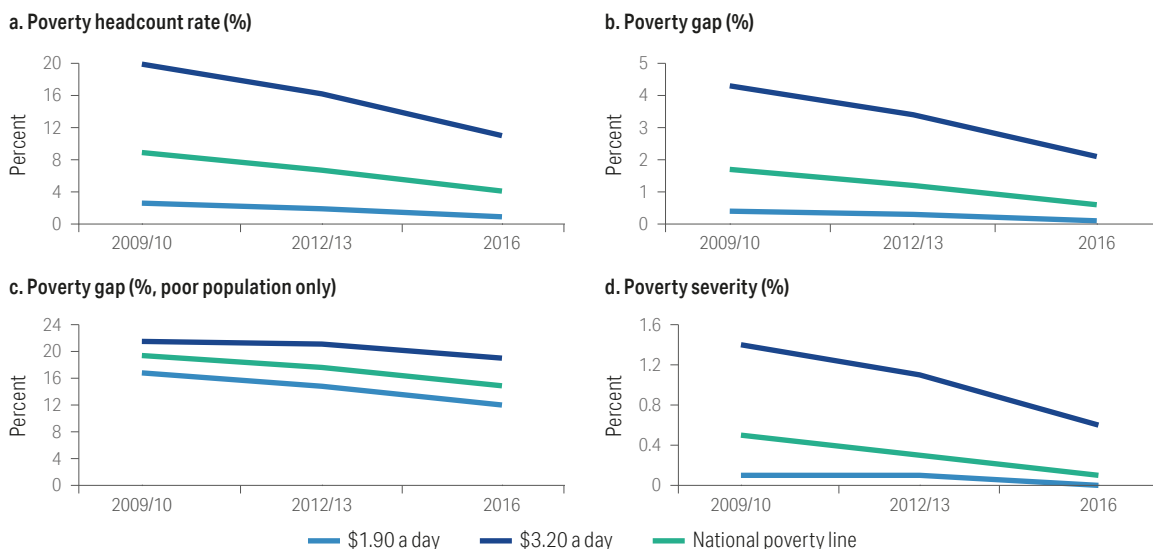
Source: Based on analysis prepared by David Newhouse, Nandini Krishnan, and Ani Rudra Silwal using HIES 2002, 2016.

FIGURE B1.1 Consumption behavior for food and nonfood expenditures, 2002 vs. 2016



The depth of poverty also decreased, with improvements among the poorest of the poor. The poverty headcount rate is the most commonly used measure of poverty; but it does not account for the intensity of poverty, as it counts only the share of people whose expenditure falls below the poverty line. To complement the headcount index, the poverty gap index and the poverty severity index are also examined. The poverty gap, which measures the average shortfall of the total population from the poverty line and is expressed as a percentage of the poverty line, was 2.1 percent in 2016. This means that consumption levels were on average 2.1 percent short of the poverty line (figure 2, panel b). Doing this calculation for just the poor population shows that their consumption fell short by 19 percent of the \$3.20 poverty line in 2016. This is less than the shortfall in 2009/10 and 2012/13—around 21 percent in both years (figure 2, panel c), and implies that progress was driven not only by poor people moving out of poverty, but also by an improvement in the depth of poverty, as the consumption level of the poor on average moved closer to the poverty line. The poverty severity index measures the average squared shortfall of the total population from the poverty line and hence puts more weight on the poorest individuals. This index also continued to decline, suggesting that reductions in poverty were accompanied by improvements among the poorest of the poor (figure 2, panel d).

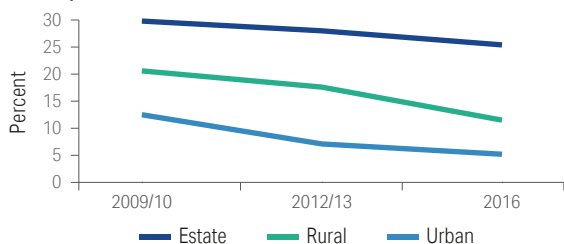
Poverty reduction was particularly strong in rural areas. The \$3.20 poverty rate in rural areas declined from 17.6 percent to 11.5 percent between 2012/13 and 2016. However, poverty remains high in the estate sector and stood at 25.4 percent in 2016, a relatively small decline from 28 percent in 2009/10. Poverty in urban areas, already low, decreased further, from 12.5 percent in 2009/10 to 5.2 percent in 2016, with a slower pace in more recent years (figure 3). This slowing likely reflects the difficulties of reducing poverty

FIGURE 2 Poverty reduction in Sri Lanka, 2009/10 – 2016

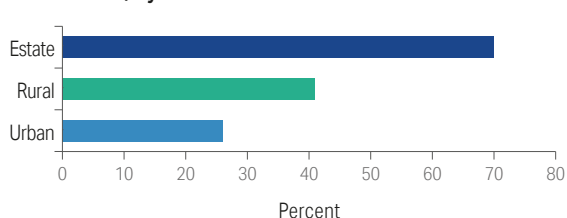
Source: World Bank staff estimates based on HIES 2009/10, 2012/13, and 2016.

Note: The poverty rate for 2009/10 does not include the Mannar, Kilinochchi, and Mullaitivu districts in the Northern Province, as they were not surveyed in the 2009/10 HIES. These districts account for only a small share of Sri Lanka's overall population and do not have a significant effect on national-level estimates.

that remains deeply entrenched. In the estate sector, 70 percent of the population belongs to the bottom 40 percent of the per capita consumption distribution, which is significantly higher than the corresponding share in the rural sector (41 percent) and urban sector (26 percent) (figure 4).

FIGURE 3 Trend in \$3.20 poverty rates by geographic sector, 2009 – 16

Source: World Bank staff estimates based on HIES 2009/10, 2012/13, and 2016.

FIGURE 4 Share of population in the bottom 40 percent of the national per capita consumption distribution, by sector

Source: World Bank staff estimates based on HIES 2016.

While disparities between geographic sectors appear large, an outdated sector classification makes it difficult to get an accurate understanding of the true extent and nature of urban and rural poverty. Poverty remains concentrated in rural areas, which is not surprising given that almost 80 percent of the population resides in rural areas according to official sector classifications: in fact, of the poor, 82 percent were rural residents, with the rest living in the urban sector (8 percent) and the estate sector (10 percent). These numbers at first glance suggest that there is little poverty in urban areas. However, the

current statistical definition of urban, rural, and estate sectors relies on administrative boundaries that were established a long time ago and underestimates the extent of urbanization in Sri Lanka. This limits our understanding of poverty in urban and peri-urban areas, which have expanded significantly over the past decades (see box 2). UN-Habitat (2018) shows that urban and semi-urban areas in Sri Lanka have extended beyond the official administrative boundaries. This situation raises the possibility that urban poverty is significantly understated and that the urban poor are being missed in pro-poor policies.

Poverty was reduced almost everywhere but the pace of progress varied significantly across the country. The \$3.20 poverty rate declined in almost all districts between 2012/13 and 2016. The improvement was particularly steep in districts where the poverty rate was initially high—above 30 percent—in 2012/13, such as Mannar, Mullaitivu, Batticaloa, and Moneragala. Significant improvements were also observed in the Uva, Southern, and North Central Provinces. Meanwhile, the North Western Province and Western Province (which includes Colombo) recorded the lowest poverty rates in 2016. Overall, the number of districts with poverty rates above 30 percent declined, from five districts in 2012/13 (figure 5) to just two districts in 2016 (Kilinochchi and Mullaitivu, both in the Northern Province) (figure 6).

While the Northern and Eastern Provinces have the highest share of population living in poverty, the largest numbers of poor people live in and around the predominantly rural and agricultural Highlands. District-level poverty rates measured at \$3.20 per day are high in the Northern and Eastern Provinces, but the absolute number of poor in these provinces is low because they are sparsely populated. In comparison, the districts with the largest number of poor are Ratnapura, Kandy, and Badulla, which together account for about a quarter of all poor (figure 7). This geographic pattern of poverty is similar using the national poverty line.

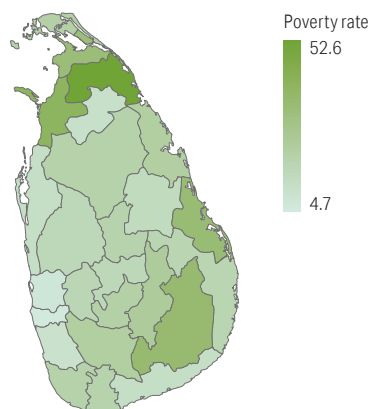
BOX 2 Geographic sector classifications in Sri Lanka

On record, Sri Lanka's share of urban population is below 20 percent and among the lowest in the South Asia region. According to the HIES 2016, which uses the official statistical classification for urban, rural, and estate sectors, only 17.4 percent of Sri Lankans live in urban areas, while the majority of the population (78.1 percent) lives in rural areas. By this estimate, Sri Lanka is one of the most rural societies in South Asia and in the world. But Sri Lanka also has sustained high GDP growth and a per capita GDP that is the second highest in the South Asia region. Sri Lanka's low urbanization rate thus appears puzzling, given that economic growth is usually accompanied by rural to urban migration.

In fact, the urbanization rate in Sri Lanka is likely underestimated because the official classification of sectors relies on administrative boundaries. That is, municipal councils, urban councils, and town councils are defined as urban areas; plantations with 20 acres or more and 10 or more resident laborers are defined as part of the estate sector; and all other areas are classified as rural. Such an approach misses urbanization that occurs outside administrative areas that would otherwise be classified as urban. Indeed, an analysis of satellite data shows urban and semi-urban areas extending beyond the official administrative boundaries that determine urban areas in Sri Lanka. While the official estimate of the population of the nine provincial capitals was 1.5 million in 2017, satellite imagery put the estimate at 7.4 million. Analysis of historical satellite data also reveals that urban population expanded at an average annual rate of 6.4 percent over the period 1995–2017. Recent studies put Sri Lanka's urbanization rate at between 35 percent and 45 percent (UN-Habitat 2018). While there is not a single standard for the classification of geographical areas, a revision of the definition to better reflect the actual functions of towns would improve understanding of population settlement and migration patterns as well as local and regional development issues.

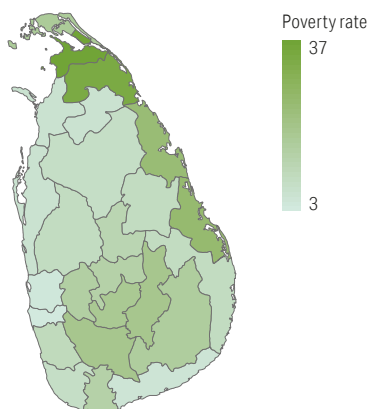
Sources: World Bank staff estimates based on 2016 HIES data (for the proportion of the urban and rural population); International Labour Organization, "Inventory of Official National-Level Statistical Definitions for Rural/Urban Areas," https://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/genericdocument/wcms_389373.pdf; UN-Habitat 2018.

FIGURE 5 \$3.20 poverty rates in 2012/13 by district



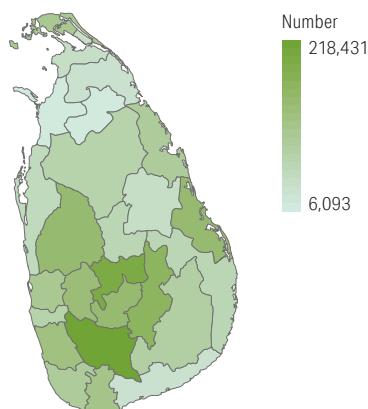
Source: World Bank staff estimates based on HIES 2012/13.

FIGURE 6 \$3.20 poverty rates in 2016 by district



Source: World Bank staff estimates based on HIES 2016.

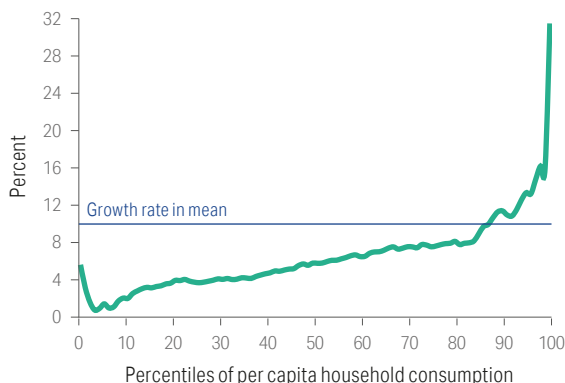
FIGURE 7 Number of \$3.20 poor by district



Source: World Bank staff estimates based on HIES 2016.

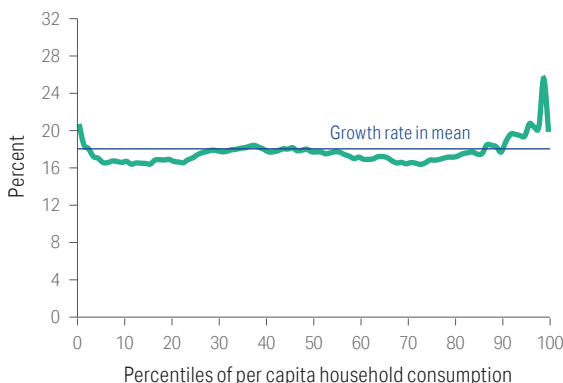
Following a marked increase in inequality between 2009/10 and 2012/13, inequality increased slightly more through 2016. After a significant increase—from 36.1 to 38.7—between 2009/10 and 2012/13, the Gini index of inequality rose slightly further to 39.3 in 2016. Between 2009/10 and 2012/13, consumption grew relatively slowly among households in the bottom of the distribution and much faster among those in the top (figure 8). In comparison, overall consumption growth accelerated to an average of 18 percent between 2012/13 and 2016 and was also more balanced across the distribution. Increases were still strongest for the top 10 percent (figure 9).

FIGURE 8 Change in per capita consumption between 2009/10 and 2012/13



Source: World Bank staff estimates based on HIES 2009/10 and 2012/13.
 Note: Figure shows a Growth Incidence Curve, i.e., the growth rate in per capita consumption across percentiles of the same distribution. Calculations for 2009/10 do not include the Mannar, Kilinochchi, and Mullaithivu districts in the Northern Province, as they were not surveyed.

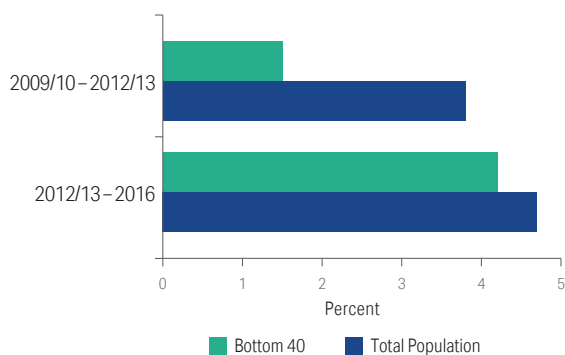
FIGURE 9 Change in per capita consumption between 2012/13 and 2016



Source: World Bank staff estimates based on HIES 2012/13 and 2016.
 Note: Figure shows a Growth Incidence Curve, i.e., the growth rate in per capita consumption across percentiles of the same distribution.

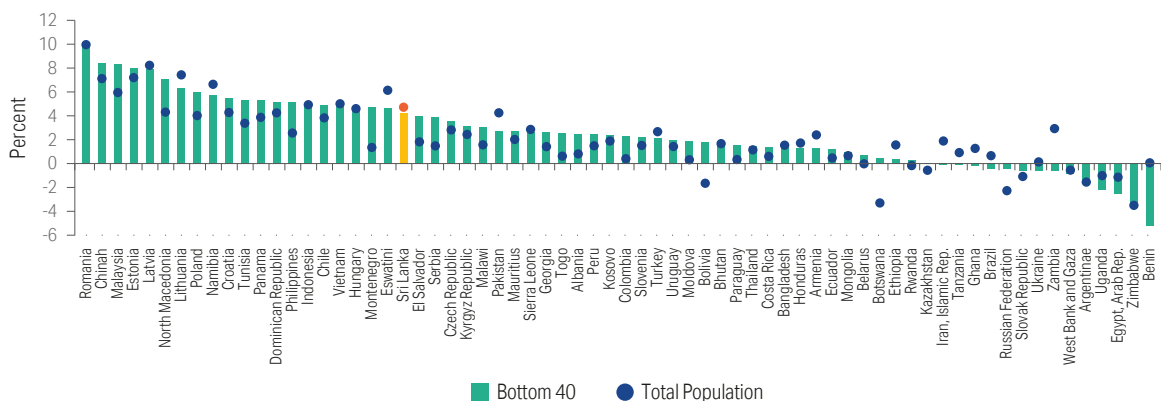
Growth was inclusive but less pro-poor. Per capita consumption growth of the bottom 40 percent recorded an annualized 4.2 percent but was still below the population average of 4.7 percent between 2012/13 and 2016. This growth represents an acceleration relative to the previous period of 2009/10–2012/13, when per capita consumption of the bottom 40 percent increased by only 1.5 percent, compared to a 3.8 percent increase for the total population over the same period (figure 10). Sri Lanka's recent performance compares well to that of other countries for which data on shared prosperity were available (figure 11).

FIGURE 10 Per capita consumption growth, bottom 40 percent vs. total population, 2009/10–2013 and 2012/13–2016



Source: Global Database of Shared Prosperity, 2019, <https://datacatalog.worldbank.org/dataset/global-database-shared-prosperity>.

FIGURE 11 Per capita consumption growth of the bottom 40 percent and total population, circa 2012–17

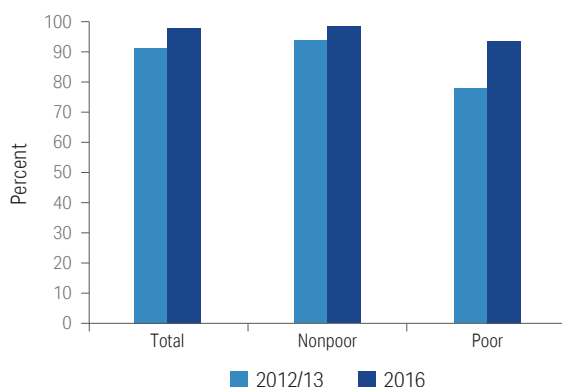


Source: Global Database of Shared Prosperity, 2019, <https://datacatalog.worldbank.org/dataset/global-database-shared-prosperity>.

Note: Orange line indicates data for Sri Lanka.

Progress in nonmonetary indicators of welfare

Access to electricity is now almost universal, thanks to significant progress among the poor. Electricity coverage surpassed 99 percent in 2016, up from 97 percent in 2012/13 (figure 12). Access improved significantly among the poor, from 78 percent to 93 percent. The largest increases in access to electricity were seen in households in the Northern Province (increase of 26 percentage points), Eastern Province (12 percentage points), Uva Province (11 percentage points), and North Central Province (10 percentage points). However, gaps remain the largest in the Northern and Eastern Provinces, with electricity coverage rates of 93 percent and 94 percent in 2016, respectively.

FIGURE 12 Access to electricity among poor vs. nonpoor, 2012/13 and 2016

Source: World Bank staff calculation using HIES 2012/13 and 2016.

water to drink and 9 percent lacked water for bathing and washing (table 1). Absolute water shortages remain a challenge for some households: almost 11 percent of the poor did not have enough water to drink in the previous year, and about 14 percent of them did not have enough water for bathing and washing.

Broader and significant challenges remain on water- and sanitation-related issues. Only about 35 percent of households had access to tap water as of 2016. Across provinces, access to tap water was lowest in the North Western Province (9 percent) and the Northern Province (11 percent). The most common source of drinking water was wells—about 43 percent of households got their water from wells located either within or outside the premises. Households in the Northern Province were significantly more likely to drink water from a well. About 20 percent got drinking water from other sources (e.g., tube well, river, rain water, etc.). Nationally, about 6 percent of the population lacked sufficient

TABLE 1 Share of population with access to water in 2016, nationally and by province (percent)

	National	WP	CP	SP	NP	EP	NWP	NCP	UP	Sab
Source of drinking water										
Well: Protected well within premises	32.4	38.7	14.9	35.7	36.1	33.9	45.4	14.6	20.0	33.1
Well: Protected well outside premises	10.1	3.9	6.9	7.2	29.2	11.4	19.1	14.4	9.2	11.3
Well: Unprotected well	2.2	1.0	1.3	4.0	3.2	1.6	3.1	2.1	1.7	3.8
Main tap line: Tap inside home	28.3	47.3	33.3	30.9	1.5	28.1	5.2	19.2	23.4	14.0
Main tap line: Tap within unit/ premises	5.1	1.7	4.5	9.3	2.8	12.8	3.1	8.6	7.3	4.0
Main tap line: Tap outside premises	1.6	1.1	1.1	1.6	6.3	2.0	0.8	2.5	1.3	1.0
Other: Project in village	7.1	3.0	14.1	7.1	1.3	3.1	5.7	6.8	16.9	11.6
Other: Tube well	3.3	2.7	2.0	1.1	11.2	5.1	8.3	1.3	1.5	0.7
Other	10.1	0.7	21.8	3.1	8.3	2.2	9.3	30.5	18.8	20.5
Enough water to drink during last year	93.5	97.8	91.6	94.5	95.4	94.5	89.3	89.0	91.3	89.9
Enough water to bath & wash during last year	90.8	96.1	87.2	91.0	96.9	93.2	88.6	87.3	80.3	85.8

Source: World Bank staff calculation using HIES 2016.

Note: WP = Western Province; CP = Central Province; SP = Southern Province; NP = Northern Province; EP = Eastern Province; NCP = North Central Province; NWP = North Western Province; UP = Uva Province; Sab = Sabaragamuwa Province.

Almost all Sri Lankans have access to adequate sanitation, but few are connected to a drainage system. Nearly all of the population—98 percent—had access to a sealed toilet in 2016, and the share was only slightly lower among the poor, at 96 percent. However, less than 4 percent of the population have

a toilet that is connected to a drainage system, while 94 percent have their toilet connected to a pit or tank. Moreover, less than half of the population, and about a third of the poor, have a toilet inside the house. The Northern and North Central Provinces lag significantly in all these indicators (table 2).

TABLE 2 Share of households with adequate sanitation, nationally and by province (percent)

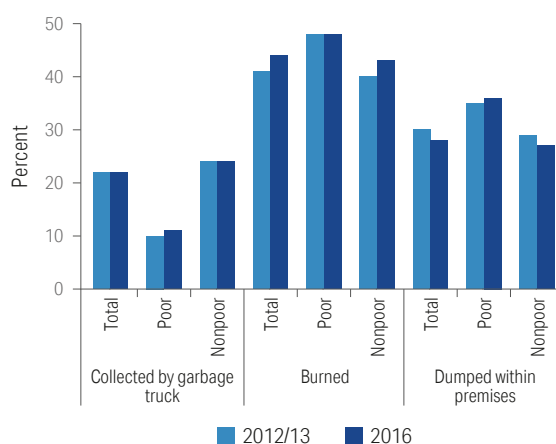
	National	WP	CP	SP	NP	EP	NWP	NCP	UP	Sab
Availability of toilet										
Within unit: Exclusively for household	46.7	70.5	38.1	36.8	22.8	55.0	40.5	26.8	34.3	35.7
Within unit: Shared with another household	1.2	1.4	1.2	0.8	0.6	1.3	1.4	1.1	1.2	1.1
Outside unit: Exclusively for household	46.2	23.9	54.0	57.1	67.2	37.3	51.2	63.7	59.1	57.4
Outside unit: Shared with another household	3.8	2.6	4.9	3.5	5.3	3.4	4.2	6.3	3.7	4.1
Other: No toilet for housing unit; toilet is shared with another unit	1.3	0.6	1.4	1.6	2.9	1.3	1.8	1.7	1.3	1.4
Other: Public toilet	0.5	1.0	0.4	0.1	0.5	0.1	0.3	0.0	0.3	0.3
Other: Not using toilets	0.3	0.0	0.1	0.1	0.7	1.6	0.7	0.5	0.1	0.1
Type of toilet										
Water seal connected to pit/tank	94.2	92.0	94.7	98.1	92.7	90.7	97.3	90.9	93.7	97.5
Water seal connected to drainage system/piped sewer	3.6	6.1	2.9	0.9	5.1	6.7	1.5	1.9	3.7	1.2
No water seal	1.3	1.5	1.2	0.4	0.2	2.1	0.9	5.0	1.2	0.5
Direct pit	0.7	0.1	1.2	0.6	1.7	0.3	0.3	2.2	1.4	0.7
Other	0.1	0.3	0.0	0.0	0.2	0.2	0.0	0.1	0.0	0.0

Source: World Bank staff calculation using HIES 2016.

Note: WP = Western Province; CP = Central Province; SP = Southern Province; NP = Northern Province; EP = Eastern Province; NCP = North Central Province; NWP = North Western Province; UP = Uva Province; Sab = Sabaragamuwa Province.

Waste management remains a significant issue, as almost 80 percent of Sri Lankans burn or dump their garbage. Nationally, only 22 percent of households have their trash collected by a garbage truck. Most often, garbage is burned (44 percent) or dumped within the premises (28 percent). The situation is much worse among the poor (figure 13). Service coverage is significantly better in urban areas, where 81 percent of households are serviced by garbage trucks, compared to only 11 percent and 2 percent respectively among the rural and estate sector populations. The burning or dumping of waste can have a detrimental impact on the environment and on population health.

FIGURE 13 Treatment of waste among poor and nonpoor



Source: World Bank staff calculation using HIES 2016.

Housing conditions improved but are still lagging in the Northern and Eastern Provinces. In the Northern Province, over 3 percent of the population still lives in a slum/shanty, though this is an improvement from the 10 percent share in 2012/13. Overcrowding is much more significant in the Northern and Eastern Provinces; the share of households living in dwellings where two adults have the equivalent of less than one room is 51 percent in the Northern Province and 43 percent in the Eastern Province, compared to the national average of 32 percent. Electricity is the primary source of lighting—nationwide coverage is almost 98 percent—but 7 percent of households in the Northern Province still rely on kerosene. Firewood remains the predominant cooking fuel (69 percent) almost everywhere except the Western Province. Less than 30 percent of all households use gas (table 3).

TABLE 3 Housing conditions nationally and by province

	National	WP	CP	SP	NP	EP	NWP	NCP	UP	Sab
Type of structure (% population)										
Single house	93.6	93.2	84.0	97.6	96.0	96.9	98.1	99.6	88.5	92.6
Slum/shanty	0.7	0.8	0.1	0.2	3.3	1.6	0.6	0.1	0.2	0.4
Other	5.7	6.0	15.9	2.2	0.7	1.5	1.2	0.3	11.3	7.0
Number of bedrooms	2.5	2.5	2.6	2.6	2.1	2.1	2.7	2.6	2.6	2.5
Overcrowding measure ^a (% population)										
< 0.5	32.3	34.2	33.5	26.7	51.2	43.3	21.7	23.4	29.1	33.3
Between 0.5 and 1	53.4	53.7	49.6	59.2	39.8	48.3	58.7	57.4	54.7	51.8
Between 1 and 1.5	14.3	12.0	16.9	14.1	9.0	8.4	19.5	19.2	16.2	14.9
Principal type of lighting (% population)										
Kerosene	2.1	0.7	2.2	0.9	6.9	5.0	2.4	1.7	2.9	2.6
Electricity	97.5	99.1	97.4	99.0	92.9	94.1	97.2	98.2	96.6	97.3
Solar energy	0.3	0.2	0.4	0.1	0.2	0.9	0.4	0.1	0.4	0.1
Generator/battery	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Principal type of cooking fuel (% population)										
Firewood	68.8	39.5	75.0	77.0	80.8	68.4	83.8	87.1	89.8	86.2
Gas	29.5	57.4	23.9	22.3	16.1	29.0	14.9	12.6	9.9	13.4
Kerosene	1.2	2.4	0.8	0.3	2.8	1.6	0.8	0.0	0.1	0.1
Electricity	0.1	0.2	0.0	0.0	0.1	0.4	0.1	0.1	0.0	0.0
Saw dust/paddy husk	0.1	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0
Other	0.3	0.5	0.2	0.3	0.1	0.1	0.4	0.1	0.1	0.2

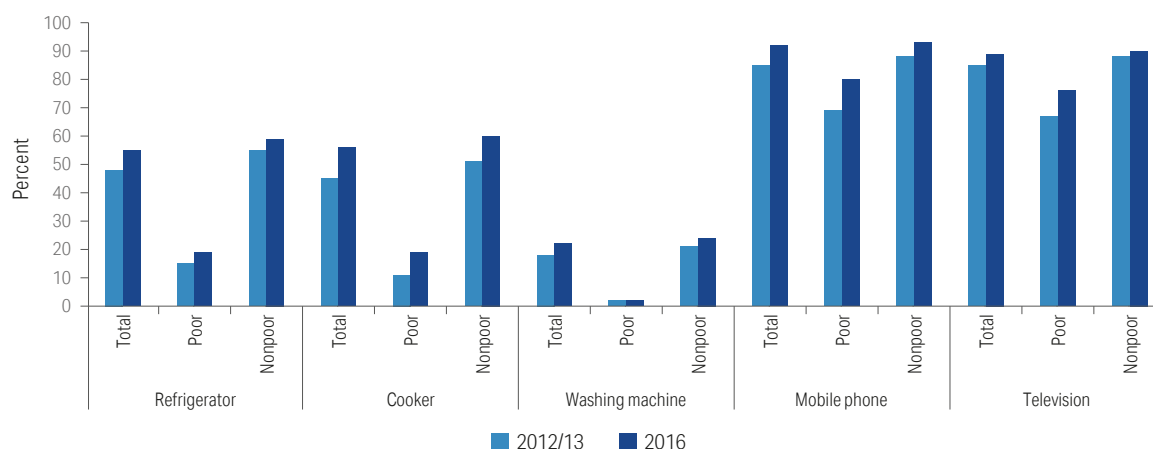
Source: World Bank staff calculation using HIES 2016.

Note: WP = Western Province; CP = Central Province; SP = Southern Province; NP = Northern Province; EP = Eastern Province; NCP = North Central Province; NWP = North Western Province; UP = Uva Province; Sab = Sabaragamuwa Province.

a. Overcrowding is defined as number of bedrooms divided by an adult-equivalent household size (adult = 1, child = 0.5).

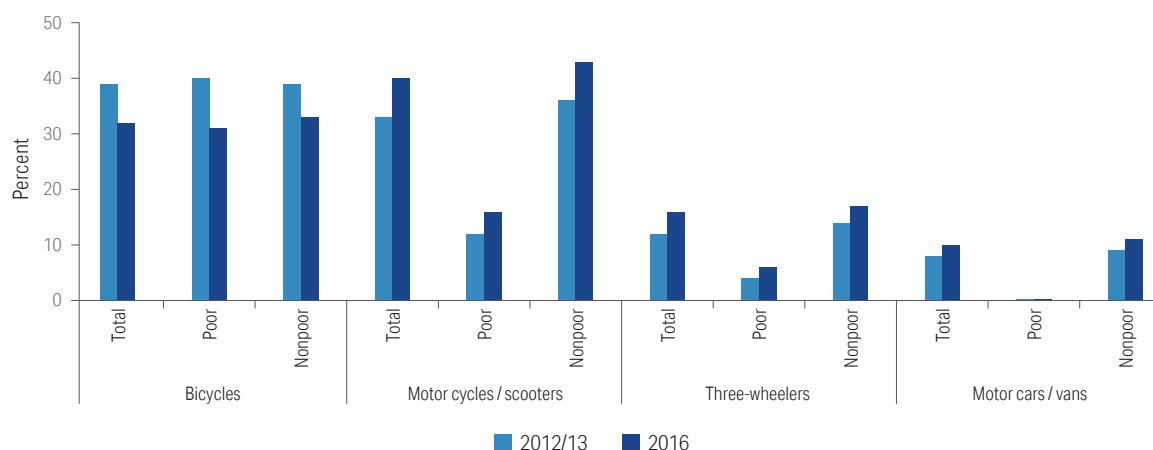
Gains in asset ownership, consistent with a rise in living standards, were widely observed across the distribution. Ownership rates for major durable assets, such as refrigerators, washing machines, mobile phones, and televisions, increased between 2012/13 and 2016. Among the poor, ownership of TVs and mobile phones saw large increases, 9 percentage points and 12 percentage points, respectively, narrowing the gap between the poor and nonpoor (figure 14). Meanwhile, ownership rates for washing machines improved mainly among the better-off. There was a small increase in the ownership of transport vehicles, with a shift toward motorized modes of transport. In 2016, 40 percent of the population owned a motorcycle or motor scooter, making these vehicles more popular than bicycles (figure 15). The level of land ownership is high and increased between 2012/13 and 2016. Most of the owned land was occupied by a housing unit, consistent with the high rate of homeownership in Sri Lanka—82.9 percent as of 2012 (DCS 2012a).

FIGURE 14 Ownership of household assets, 2012/13 and 2016



Source: World Bank staff estimates based on HIES 2012/13 and 2016.

FIGURE 15 Ownership of vehicles, 2012/13 and 2016



Source: World Bank staff calculation using HIES 2012/13 and 2016.

Low ownership of labor-saving household durables and low access to water and other household infrastructure increase the opportunity cost of women's time and could constrain their labor force participation. Low female labor force participation, at around 35 percent, remains a salient feature of Sri Lanka's labor market. There has been little progress over time, despite rising educational attainment among women. Previous research from other countries suggests that the acquisition of labor-saving household durables helps increase married women's labor force participation by significantly reducing their time spent on household chores. In Sri Lanka, only 22 percent of households own washing machines, and the share drops to below 10 percent among both the poor and bottom 40 percent. Those households with no access to tap water within the premises likely need to spend time gathering water for cooking, bathing, and laundry. Almost half of Sri Lankans don't have a refrigerator in the household, implying that women likely spend more time cooking than they would otherwise, as meals cannot be stored for long periods. According to an evaluation of an Asian Development Bank project in Sri Lanka (Third Water Supply and Sanitation Project), 82 percent of women reported that improvements in the water supply made collecting water easier, and more than half increased their incomes because they were able to substitute the time spent collecting water with income-generating activities (ADB 2011).

Moreover, the use of firewood for cooking purposes places a burden on women's time. The heating of cookstoves relies predominantly on the use of biomass fuel in the form of firewood, especially among the less well-off: only about 20 percent of the poor report owning a gas, kerosene, or electric cooker in 2016 (figure 14). Biomass fuel is disproportionately used by poorer households, as richer households are much more likely to use LPG (liquefied petroleum gas) (Nandasena, Wickremasinghe, and Sathiakumar 2012).⁶ The demands on women's time posed by caring for children and the elderly and performing various household chores are likely to act as significant barriers to women's participation in the labor market.

6. Additionally, the use of biomass fuel for cooking is detrimental to health. Smoke from the burning of firewood generates harmful substances such as particulates, carbon monoxide, nitrogen oxides, and other carcinogens. The high reliance on wood-burning cooking stoves thus exposes household members to indoor air pollution, which has potentially harmful health effects such as respiratory illnesses. The exposure is greatest for those who spend the most time at home—women, children, and the elderly, the latter a rapidly growing population group. Previous studies have found that Sri Lanka faces significant morbidity and mortality risk from indoor air pollution due to the widespread use of biomass fuel: the World Health Organization (WHO) estimates that 4,300 deaths were attributable to indoor air pollution in Sri Lanka in 2004 (cited in Elledge et al. 2012). Elledge et al. (2010) cites 2009 WHO data calling respiratory diseases the fifth most important cause of neonatal mortality, and also notes that risks of stillbirths increase with exposure to biomass smoke.

Characteristics of the poor

Poor households are larger, younger, and less educated

Poor households are larger in size and have higher dependency ratios than others (table 4). They also have higher dependency ratios, at 0.9 compared to an average of 0.7 for nonpoor households, which means that poor households have a higher number of children or elderly who need to be supported by each working-age member.⁷ The heads of poor households are slightly younger and less likely to be married than heads of nonpoor households. There are no significant differences in the gender of the household head by poverty status.

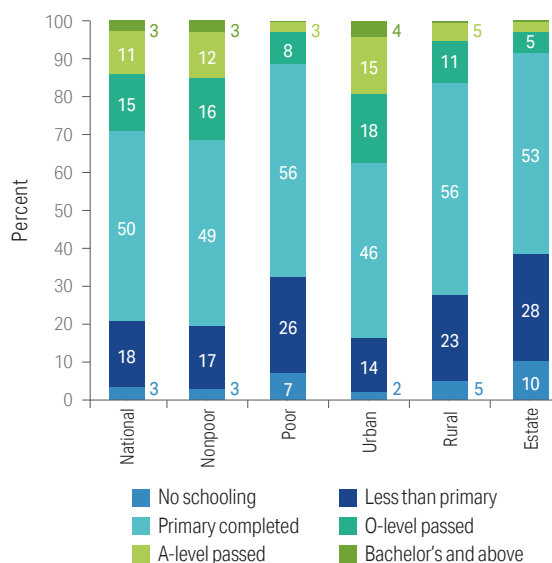
The gap in educational outcomes between the poor and the nonpoor remains. Sri Lanka has historically excelled in educational outcomes, and they continued to improve between 2009/10 and 2016. Among the cohort ages 20–29 years old, the share with primary education or less decreased from 53 percent to 45 percent during this period, while an increasing share passed the O-level and A-level examinations. However, the share with a bachelor's degree and above remained low in 2016, at 4 percent. The enrollment rate in early childhood education among three- to five-year-olds was about 49 percent nationally in 2016, at roughly the same level as in 2012. While enrollment rates are high in the Western, Northern, and Eastern Provinces (between 56 and 63 percent), they are considerably lower in the Uva and Sabaragamuwa Provinces, at 41 percent and 34 percent, respectively. Moreover, there is a large gap in educational achievement between the poor and nonpoor (figure 16). Among working-age adults (ages 15 and above), nearly 90 percent of the poor have completed primary

TABLE 4 Demographic profile of the poor vs. nonpoor

	Total	Nonpoor	Poor
Household size	4.5	4.3	5.4
Dependency ratio	0.7	0.7	0.9
Age of head	34	34.3	31.1
Female head (%)	53	53	52
Head is married (%)	48	49	43

Source: World Bank staff estimates based on HIES 2012/13 and 2016.

FIGURE 16 Educational attainment by poverty status and sector



Source: World Bank staff calculation using HIES 2016.

7. Dependency ratios are calculated as the number of household members who are dependents divided by the number of working-age adults.

education or less, compared to less than 70 percent of the nonpoor; about 8 percent of the poor and 16 percent of the nonpoor have O-level certificates. The estate sector lags significantly behind, with almost 40 percent having less than primary education and only 8 percent having O-level certification or higher.

A greater share of incomes for the poor is from nonfarm sources, while indebtedness has decreased

Poor households have proportionately fewer working adults, who are also more likely to be working in the low-paying agricultural sector. Working-age adults in poor households are slightly less likely than those in nonpoor households to be occupied in income-earning activities. Those who are working are more likely to be engaged in wage work and less likely to be self-employed. Moreover, the working poor are significantly more likely to be engaged in agriculture, though the importance of the sector as a source of income is declining over time (table 5).

TABLE 5 Labor market characteristics of the poor and nonpoor, 2012/13 and 2016

	2012/13			2016		
	National	Nonpoor	Poor	National	Nonpoor	Poor
Percentage of working adults in household	48.9	49.2	47.0	51.1	51.4	47.9
Percentage of adults in wage work	63.6	62.5	69.0	62.0	61.2	68.7
Percentage of adults in self-employment	36.5	37.6	31.0	38.0	38.8	31.3
Percentage of adults working in agriculture	25.6	22.8	39.5	23.0	21.4	35.5
Percentage of adults working in nonagriculture	74.4	77.2	60.5	77.0	78.6	64.5

Source: World Bank staff estimates based on HIES 2012/13 and 2016.

Overall indebtedness decreased, including for the poor, and debt levels dropped. In 2016, 53 percent of poor and 65 percent of nonpoor households held some debt. Indebtedness slightly declined compared to 2012/13. The average ratio of outstanding debt to household annual consumption for poor households was 72 percent in 2016, equivalent to 8.6 months of household consumption. The corresponding figure in 2012/13 was 101 percent (figure 17, panel a).⁸

Sources of financing have also become more formal. The poor are less likely to have debt from formal than from informal sources. Overall, the sources of debt shifted toward more formal sources and away from consumption-driven and expensive credit suppliers such as pawn shops and retail outlets. The share of households

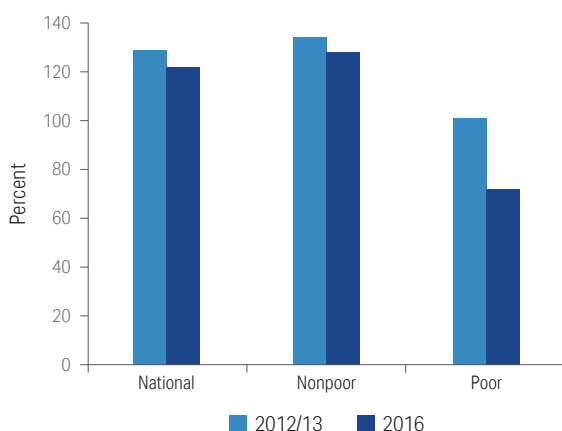
8. The trends that emerge in the data may be contrary to popular perception, as poor households, especially those in former conflict areas, are perceived to be trapped in a debt cycle. More work is needed to better understand the situation of highly indebted poor households.

with pawned assets halved between 2012/13 and 2016, from 42 to 21 percent, with decreases among both the poor and nonpoor. Borrowing from retail outlets also decreased, from 16 to 11 percent of households (figure 18). However, indebtedness to retail outlets is about twice as common for the poor as for the nonpoor, who are most likely to borrow from banks or finance companies (considered more formal sources of credit).

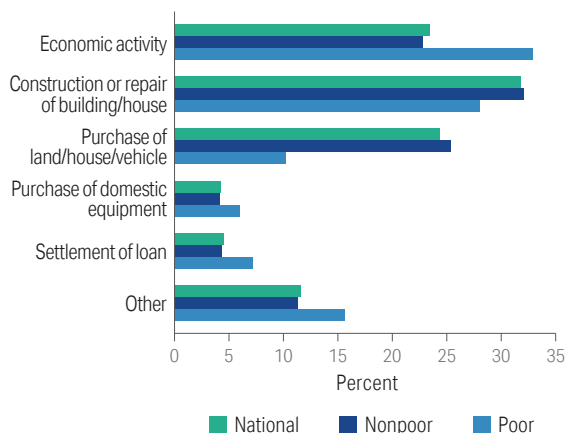
The poor borrow mainly to finance economic activities. Borrowing to build or repair a house is the second most common reason cited by the poor (27 percent) and the most common reason cited by the nonpoor (32 percent). The poor are much less likely than the nonpoor to finance the purchase of land, a house, or a vehicle by borrowing (figure 17, panel b).

FIGURE 17 Size of and reasons for debt

a. Debt as share of annual consumption (%)



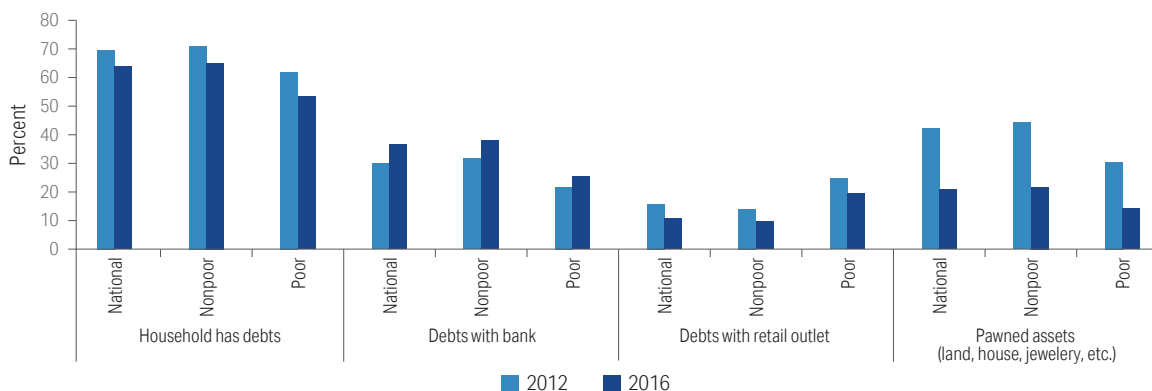
b. Reasons for debt



Source: World Bank staff estimates based on HIES 2012/13 and 2016.

Note: Reasons for debt relate only to debt contracted from banks, finance and leasing companies, employers, and money lenders.

FIGURE 18 Household debt, 2012/13 and 2016



Source: World Bank staff estimates based on HIES 2012/13 and 2016.

Progress was slow in the estate sector, with households characterized by high poverty, lower human capital outcomes, and gaps in access to basic services

Estate sector residents remain one of the most marginalized group in Sri Lanka, with about a quarter classified as poor.⁹ Estate sector poverty rates fell gradually from 29.8 percent in 2009/10 to 28 percent in 2012/13 and 25.4 percent in 2016 (figure 3). This latest poverty estimate is more than double the national poverty rate. Slow progress in the estate sector is also reflected in the low ownership of assets—land ownership is only 37 percent of households in the estate sector, less than half the national average; only 20 percent own a refrigerator and only 3 percent own a washing machine. Human development outcomes also lag significantly behind: the estate population continues to be plagued by chronic malnutrition, poor housing conditions, and lack of access to basic services, including water and sanitation, health services, and education.

Housing conditions remain poor in the estate sector, and overcrowding is severe. Some 62 percent of the estate population lived in row houses or line rooms as of 2016, with no improvement from 2012/13.¹⁰ In stark contrast, 94 percent of Sri Lankans live in single houses. Moreover, estate residents live in severely overcrowded conditions, with 71 percent having half a room or less per adult equivalent household member. Among the urban and rural population, this proportion is much lower, at 41 percent and 28 percent, respectively. In line with national trends, access to electricity increased strongly, from 85 percent in 2012/13 to 95 percent in 2016. But there were no improvements in access to tap water, and half the estate population gets their drinking water from rivers, tanks, and streams. Contamination of water supplies at source is high, and almost all estate households surveyed in World Bank (2017) reported that they treated the water prior to drinking by boiling, chlorinating, and filtering. Only 21 percent of estate households had toilets within their home, compared to 72 percent in urban and 44 percent in rural areas.

Accessibility and quality of services are worse in the estate sector. It takes longer to reach schools (particularly secondary schools), hospitals, and maternity facilities in the estate sector than it does in other

9. The estate sector consists mainly of tea or rubber plantations that rely on resident workers and are managed or owned by the state, regional plantation companies, and individuals or families. The Sri Lanka Department of Census and Statistics defines the estate sector as including land that is over 20 acres, with 10 or more resident workers. (Given that most coconut estates employ only a small resident labor force, they usually do not fall into the estate sector category.) These plantations were created during the British colonial period as self-sufficient enclaves. Labor was imported from South India, and workers were confined within the plantation structure, resulting in “residential labor.” Housing, health care, and education were provided by the estate management. There was thus very little socioeconomic integration with the rest of the country, a situation that continues today, although health and education services are now the responsibility of the state. According to the 2011 Census of Housing and Population (dcs 2011), approximately 0.9 million people, or 4.4 percent of the Sri Lanka population, live on estates. Most of these plantation workers reside in the Central, Uva, and Sabaragamuwa Provinces.

10. Row houses or line rooms are small barrack-style accommodations originally constructed by the British in the early 19th century that continue to serve as the living quarters for estate workers today. Most line rooms are small and windowless and have minimal basic facilities. The dilapidated conditions further contribute to unhealthy and marginalized living conditions of estate workers.

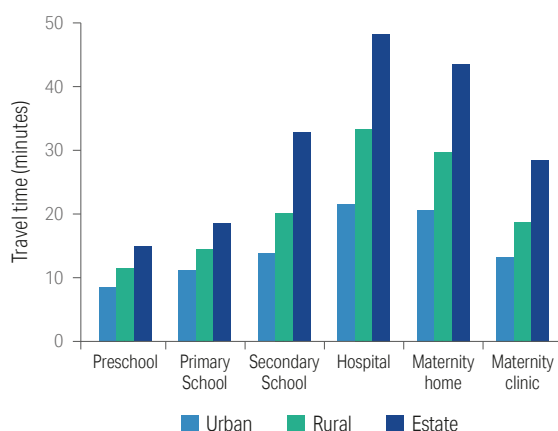
sectors (figure 19). Among women in the estate sector who have given birth, nearly all (98 percent) received prenatal care from a skilled provider for their most recent delivery, and delivery in a health facility is almost universal. However, these women are less likely to receive prenatal care from health facilities (51 percent) than women in urban and rural areas (69 percent and 66 percent, respectively). They are instead more likely to use medical health officers and public midwives.¹¹ This difference could result in differences in the quality of care received and ultimately health outcomes.

Under-five mortality declined significantly in the past decade, but children in the estate sector still suffer from poor health outcomes.

Recent results from the 2016 Demographic and Health Survey (DHS) show that under-five mortality rates decreased by more than half in the estate sector, from 33 deaths per 1,000 live births reported in the 2006/07 DHS to 15 deaths per 1,000 live births in the subsequent 10-year period (table 6). While these improvements are laudable, this rate is still notably higher than that in the rest of the country. Higher under-five mortality is mostly driven by disparities in infant mortality, which is affected by risk factors such as the quality of prenatal care, complications during pregnancy and at birth, and low birth weight (defined as less than 2.5 kg), among others. The incidence of low birth weight declined in the estate sector over the last decade but remained high in 2016, at 25 percent. The corresponding figures in urban and rural areas were 16 percent or less. Research has associated low birth weight with lower cognitive development and adverse short-term as well as long-term health implications.

Undernutrition among women and children under five remains a concern in Sri Lanka, but the problem is most severe in the estate sector. Despite improvements in the last 10 years, as of 2016 32 percent of children under the age of five in the estate sector were stunted—about double the share in other

FIGURE 19 Distance to education and health care facilities in 2016 (minutes)



Source: World Bank staff calculation using HIES 2016.

TABLE 6 Early childhood mortality rates

	Neonatal mortality	Post-neonatal mortality	Infant mortality	Child mortality	Under-five mortality
Urban	7	3	10	2	11
Rural	7	3	10	1	12
Estate	8	5	13	2	15

Source: DCS and Ministry of Health, Nutrition and Indigenous Medicine 2017, table 8.2.

Note: Childhood mortality rates are given for the 10-year period preceding the 2016 Demographic and Health Survey. Child mortality and under-five mortality measure mortality between ages one and four, and ages zero to five, respectively. All rates are expressed per 1,000 live births, except for child mortality, which is expressed per 1,000 children surviving to 12 months of age.

11. Data are from the 2016 Demographic and Health Survey (DCS and Ministry of Health, Nutrition and Indigenous Medicine 2017).

areas—and 9 percent were severely stunted. The estate sector also has a much higher prevalence of underweight, with 30 percent of children under five underweight for their age, compared to 21 percent in the urban sector and 16 percent in the rural sector (DCS and Ministry of Health, Nutrition and Indigenous Medicine 2017).¹² Anemia is prevalent, affecting 53.1 percent of children ages 6–23 months and 30.4 percent of women ages 24–59 years (World Bank 2017). Improvements have been marginal since 2006. Further, 22 percent of estate sector women are considered thin, defined as a body mass index (BMI) below 18.5. Among ever married women, 15 percent are at risk of poor birth outcomes and delivery complications because of short stature; this risk is three times higher than in the urban sector (DCS and Ministry of Health, Nutrition and Indigenous Medicine 2017).¹³

12. Infant and young child feeding practices are an important determinant of malnutrition. Adherence to best practices on initiation and duration of breastfeeding is high across all sectors; especially noteworthy is the share of estate sector children receiving colostrum, up from 70 percent in 2006/07 to 97 percent in 2016. However, households in the estate sector cannot easily afford or access a variety of nutritious food, may lack information on the timing and importance of complementary food, and may be influenced by traditional beliefs in determining children's diet (World Bank 2017). For example, the consumption of all protein sources, such as milk, meat, fish, poultry, eggs, legumes, and cheese or yogurt, is lower than in urban and rural areas (DCS and Ministry of Health, Nutrition and Indigenous Medicine 2017).

13. Short stature is an indicator of past nutritional deficiencies and a risk factor for poor birth outcomes and delivery complications. The cut-off point at which mothers are considered at risk because of short stature is usually 145 cm.



3

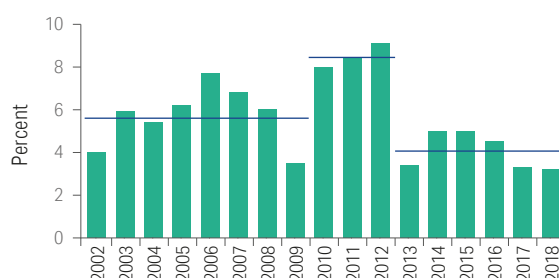
Drivers of poverty reduction

Main drivers of poverty reduction: Improvements in nonfarm labor income

Strong post-conflict recovery and growth helped establish Sri Lanka as a solid middle-income country. Real GDP grew at an average of 5.7 percent between 2002 and 2009. Following the cessation of the civil war, annual GDP growth accelerated and reached an average of 8.5 percent between 2010 and 2012, after which it slowed down significantly (figure 20). GDP growth was relatively high during the period of 2012–16—the focus of the analysis in this report—at 5.4 percent annually. Structural transformation continued at a gradual pace, with economic activities shifting from agriculture to industry and services. The expansion in the services industries was mainly driven by low-value-added activities such as transport and trade.

Poverty reduction in recent years was primarily driven by an increase in average consumption, rather than a redistributive effect. To understand the driving factors behind the progress in poverty reduction, a simple decomposition is performed to quantify the relative contribution of growth and redistribution to changes in poverty.¹⁴ The results from this exercise, shown in figure 21, suggest that strong growth in real consumption helped the poor climb out of poverty. The redistributive effect had a poverty-increasing impact, meaning that if consumption had not grown in real terms, poverty would have actually increased. Alternatively, if consumption growth had been distributed more evenly across the distribution, poverty would have declined much faster.

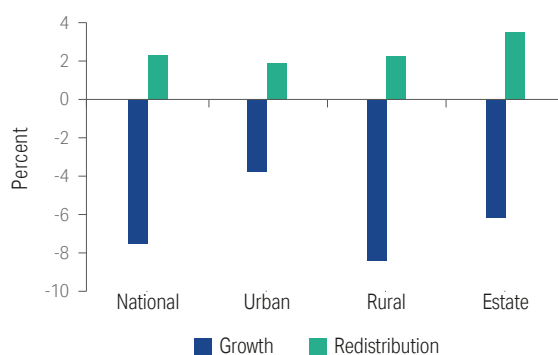
FIGURE 20 Real GDP growth, 2002–18



Source: World Development Indicators database.

Note: Dotted line shows average over years indicated.

FIGURE 21 Contribution of growth vs. redistribution to poverty reduction between 2012/13 and 2016, nationally and by sector



Source: World Bank staff calculation using HIES 2012/13 and 2016.

Note: The bars show the contribution (in percentage points) of the growth and redistribution components to the change in poverty.

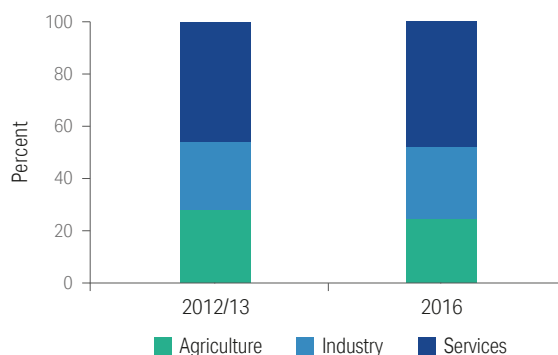
14. Specifically, changes in poverty are decomposed into a balanced growth component and a redistributive component, by fixing either relative inequalities or the relative poverty line. The growth effect is estimated as the change in poverty that is due to a variation in mean, holding inequality constant. The redistribution effect is estimated as the change in poverty that is due to a variation in the Lorenz curve, holding the mean constant. For details, see Datt and Ravallion (1992).

Labor market outcomes improved, as jobs were created and wages grew strongly. Employment grew by over 100,000 between 2012 and 2016, and of those employed, an increasing share was working in industry and services. Agriculture accounted for 24.8 percent of the employed in 2016, down from 28 percent in 2012/13. The share working in industry increased from 26.1 to 27.3 percent and the share in services from 45.9 to 47.9 percent (figure 22). In real terms, earnings grew by an annualized 7 percent between 2013 and 2017.¹⁵

Gains in labor productivity spearheaded the growth in real GDP per capita. Real GDP per capita grew at an annual rate of 5.2 percent between 2002 and 2018. A large share of the growth was due to increases in labor productivity, which led to better jobs and higher wages. However, productivity growth has fallen in recent years, after enjoying a boost between 2002 and 2012. The impact of demographic change was negative, reflecting the decline in the share of the working-age population (figure 23).

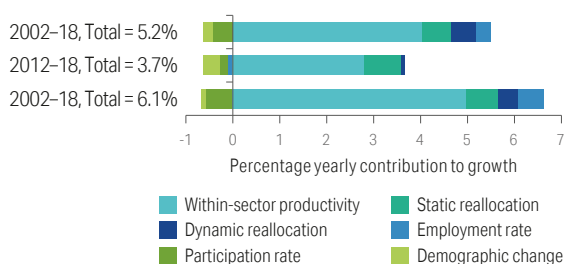
Most of the productivity growth came from increases in within-sector productivity, particularly in services, and much less from reallocation effects. Labor productivity rises when workers move from low- to high-productivity sectors or when productivity levels within sectors improve. In Sri Lanka, reallocation yielded limited productivity gains, as most of the movement occurred from agriculture toward sectors with low productivity, such as trade. Instead, most of the productivity growth was due to improvements in within-sector productivity. In peer countries such as Vietnam and

FIGURE 22 Share of the employed in agriculture, industry, and services, 2012/13 and 2016



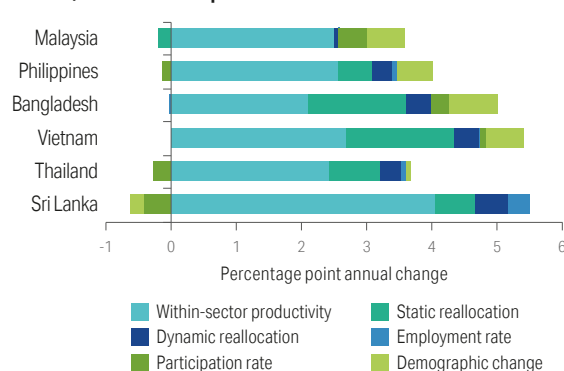
Source: World Bank staff calculation using HIES 2012/13 and 2016.

FIGURE 23 Decomposition of growth in per capita value added



Source: Based on World Bank Job Structure Tool and data from World Development Indicators.

FIGURE 24 Decomposition in growth per capita value added, Sri Lanka vs. peer countries



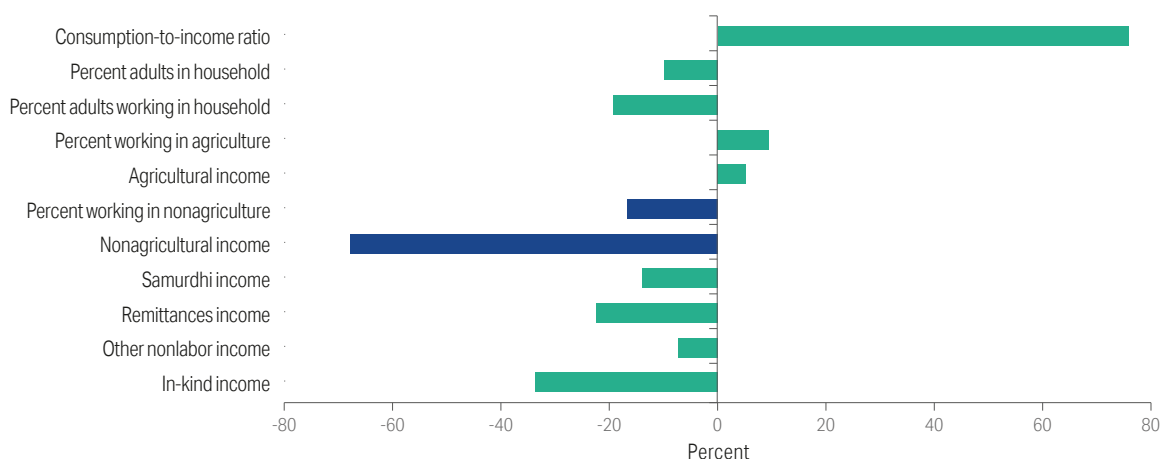
Source: Based on World Bank Job Structure Tool and data from World Development Indicators.

15. Estimates are from DCS Labour Force Surveys, 2013-17.

Bangladesh, productivity growth was comparably strong, but a significant share was due to reallocation, and these countries also benefited from favorable demographic trends (figure 24).

Reflecting improvements in labor productivity, poverty reduction between 2012/13 and 2016 is predominantly associated with higher labor income in nonfarm sectors. A further decomposition analysis that measures the relative importance of changes in demographics, employment, public transfers, and remittances for poverty reduction highlights the importance of nonfarm labor income and indicates that agriculture did not contribute to poverty reduction as it had in the previous decade (see box 3 for details on the methodology).¹⁶ During that time, a boost in farm earnings was mainly driven by higher food and commodity prices, rather than productivity growth. The increase in nonfarm labor income results from a combination of a larger share of adults working outside the agricultural sector and those adults obtaining higher labor earnings. This combination accounts for two-thirds of poverty reduction between 2012/13 and 2016 (figure 25). Increases in Samurdhi income explain about 22 percent, and increases in the number of adults engaged in economic activities contributed another 20 percent to the overall change in poverty. The consumption-to-income ratio decreased and had a positive association with poverty reduction, i.e., households had a tendency to spend proportionately less of their income, and if the ratio had stayed the same, poverty would have decreased even more. The next sections further unpack the trends at the sectoral level to better understand what led to improved earnings in the nonagricultural sectors and the decline in the agricultural sector.

FIGURE 25 Changes in poverty due to demographics and income sources



Source: World Bank staff calculation using HIES 2012/13 and 2016.

Note: The figure shows percentage contribution of different demographic factors and income sources to poverty reduction. A negative contribution means that the component helped reduce poverty. The sum of all bars amounts to 100 percent.

16. Previous analysis shows that poverty reduction between 2002 and 2012/13 was driven by growth in labor income, attributed to an increase in returns to nonfarm wage workers and higher returns to self-employed farm workers (Ceriani, Inchauste, and Olivieri 2015).

BOX 3 The Shapley-Shorrocks decomposition of changes in poverty

Researchers and policy makers are often interested in knowing what role is played in poverty reduction by changes in demographics, employment, public transfers, and remittances. Recognizing that poverty is a function of several components—total household per capita consumption (itself dependent on the number of household members), consumption-to-income ratio, and household income (see equation (1))—one can decompose changes in poverty into changes in each of these components.

$$\text{Consumption per capita} = \theta \left[\frac{n_a}{n} \left[\frac{n_o}{n_a} \left(\frac{1}{n_o} \sum_{i \in A} y_i^l \right) + \frac{1}{n_a} \sum_{i \in A} y_i^N \right] \right] \quad (1)$$

where θ is the consumption-to income ratio, n is the number of household members, n_a is the number of adults in the household, n_o is the number of occupied (employed) adults, and y_i^l and y_i^N are labor income and nonlabor income of individual i , respectively.

By changing each component, one at a time, until a complete change from the base period to the period of interest is achieved, one can simulate counterfactual welfare distributions and associated poverty rates. These are then used to assess the contribution of changes in each factor to changes in poverty. For instance, by changing labor income to its value in the period of interest while keeping all other factors at their base values, and then comparing poverty rates in the actual and the hypothetical scenarios, the contribution of changes in labor income to poverty reduction can be determined. The value of the contribution of any factor, however, depends on the sequence in which each factor is changed. In the case of three components, labor income could, for instance, be changed first, as in the example just given, or second, or third, providing different results for the contribution of labor income to poverty reduction. To overcome this issue of path dependency, the Shapley value is calculated; this value is the average contribution of a factor as the average over all possible ways of changing it. This method was originally developed by Shapley (1953) in the context of game theory to provide a solution to a cooperative game with transferable utility, where the objective is to share fairly the output of a technology jointly owned and operated by a fixed group of agents. Shorrocks (2013) proposed the use of the Shapley value as a general framework for decomposition of distributional questions.

There are some important caveats to this method of decomposing changes in poverty. First, the decomposition cannot identify whether changes in endowments of the population (e.g., higher educational levels or increases in productive assets) or changes in returns to these endowments underlie changes in poverty. Second, the counterfactual distributions used in the decomposition result from a ceteris paribus exercise in which one component at a time is modified, keeping all other components constant and not taking into account general equilibrium effects.

Source: Based on Azevedo, Nguyen, and Sanfelice 2012; Azevedo et al. 2013; Inchauste et al. 2014.

Recent trends in the agriculture sector: Slowing of agricultural income growth with reversal of favorable price trends

Agricultural households are more likely than others to be poor. Among households headed by someone performing self-employed work in agriculture, 11.9 percent are poor. Among households headed by someone performing agricultural wage work, the poverty rate is significantly higher, estimated at 21.5 percent. If the household head is working outside of the agricultural sector, the poverty rate is less than 9 percent. For comparison, the overall \$3.20 poverty rate is 11 percent.

However, agricultural households do not account for the majority of the poor. Households whose head is working in agriculture account for about 27.5 percent of all the poor, whereas those whose head works

in nonagriculture account for 43.2 percent of the poor. Households whose head is inactive account for the remaining 29.4 percent (table 7).

Falling output and prices in key export products and a stagnating paddy sector contributed to a slowdown in the growth of the agricultural sector in recent years.

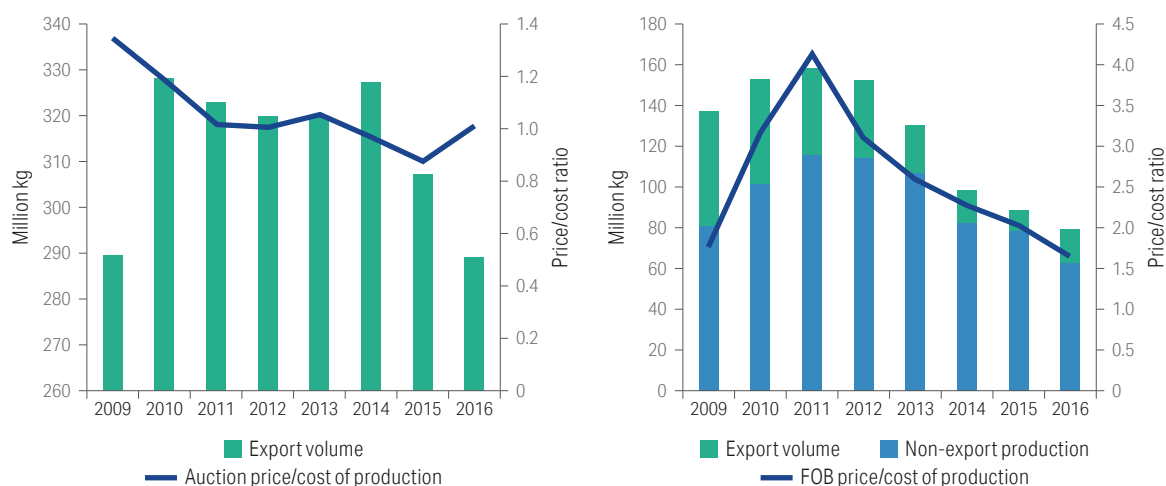
The period 2012–16 saw decreases in both output and prices of tea and rubber, both key export products, compared to the years before. Tea is Sri Lanka’s most important export commodity by value. Export quantity fell by almost 10 percent between 2012 and 2016, and the value of tea exports started to decline after years of sustained growth, though the fall in export value was buffered by the rupee depreciation. Nearly all—99 percent—of tea produced is used for exports: in 2016, of 293 million kg of tea produced, 289 million kg was exported. Profit margins, proxied using a ratio of auction price over production cost, did not improve between 2012 and 2016 (figure 26, left). Rubber saw a steep decline over this period, both in production and export volume, accompanied by an equally sharp drop in prices (figure 26, right). These trends mark a stark contrast to the trends between 2009 and 2012, when both production and profitability increased. The value added of paddy to GDP declined amid stagnating productivity and volatile production, despite an increase in the total area sown (table 8).

TABLE 7 Distribution of poor by household head’s employment status

Household head is ...	Households of this type as share of all poor (%)
Self-employed in agriculture	14.5
Wage worker in agriculture	13.0
Nonagricultural worker	42.7
Other nonagricultural worker	0.5
Out of labor force	29.4

Source: World Bank staff calculation using HIES 2016.

FIGURE 26 Output and prices for tea (left) and rubber (right), 2009–16



Source: Central Bank, "Economic and Social Statistics of Sri Lanka," various years.
Note: FOB = free on board.

TABLE 8 Paddy statistics, 2009 – 16

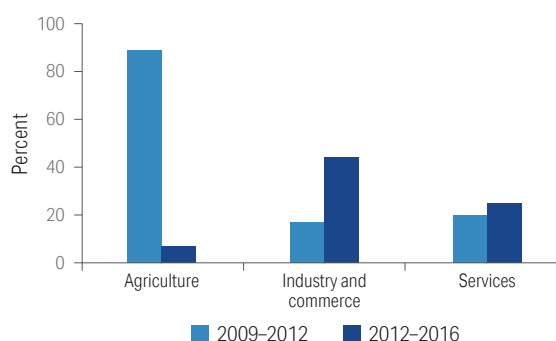
	2009	2010	2011	2012	2013	2014	2015	2016
Area sown (thousand ha)	978	1,065	1,223	1,067	1,227	964	1,254	1,114
Irrigated area (thousand ha)	730	809	940	824	958	717	984	904
Rain-fed area (thousand ha)	248	257	278	242	269	248	269	237
Production (thousand MT)	3,652	4,301	3,894	3,846	4,621	3,381	4,819	4,420
Yield per ha (kg)	4,337	4,527	3,970	4,353	4,329	4,264	4,429	4,372
Price (Rs/bushel)								
Guaranteed price	605	605	605	605	699	699	939	793
Open market price	676	598	635	618	637	843	787	772
Value added (million Rs)	41,179	48,377	44,325	43,596	52,084	43,386	76,256	52,649
Percentage of GDP	1.7	1.8	1.5	1.4	1.6	1.2	0.9	0.6

Source: Central Bank, "Economic and Social Statistics of Sri Lanka," 2018.

Note: ha = hectare; MT = metric ton.

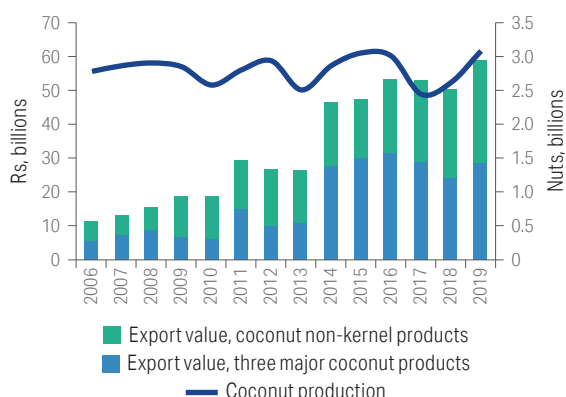
Reflecting these trends, there was limited improvement in agricultural earnings. Minimum wages in the agricultural sector increased by 89 percent during 2009–12 (in nominal terms); however, the increase was a modest 7 percent between 2012 and 2016 (figure 27). This was significantly lower than the wage growth in industry and commerce (44 percent) and services (25 percent) during the same period.

The coconut sector experienced remarkable growth, contributing to improvements in rural incomes. In recent years, coconut rose to become the second most important food commodity by export value as output grew substantially. Export values doubled between 2012 and 2016 after recording a 43 percent increase in the 2009–12 period (figure 28). The timing coincides with the rise in global demand, reflecting the expanding popularity of coconut water, coconut oil, and other processed coconut products (Hexa Research 2019). Celebrity endorsements and the marketing of coconut as a “superfood” boosted demand from health-conscious consumers around the world. Between 2012 and 2016 alone, prices of major coconut products rose between 25 percent and 53 percent (figure 29), leading to better margins for producers.

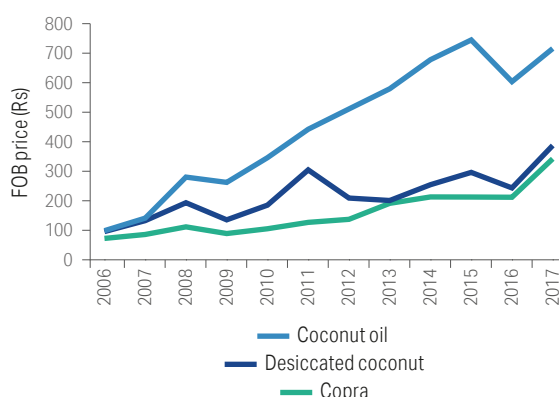
FIGURE 27 Minimum wage growth in agriculture, industry, and services, 2009 – 12 and 2012 – 16

Source: Department of Labour 2016.

Note: Figure shows the growth rate of the minimum wages index in wages board sectors.

FIGURE 28 Coconut production and exports, 2006–17

Source: Central Bank, "Economic and Social Statistics of Sri Lanka," various years.

FIGURE 29 FOB price for processed coconut products, 2006–17

Source: Central Bank, "Economic and Social Statistics of Sri Lanka," various years.
Note: FOB = free on board. Copra is dried coconut meat.

While Sri Lanka's coconut farmers may have benefited from rising global demand, coconut production requires large investments, and the longer production cycle involves risks. Domestic consumption of fresh coconuts has been relatively stable in the past decade, at around 1.7–1.9 billion nuts annually. This amounts to about 80 coconuts per Sri Lankan per year. Coconut is an essential part of the native cuisine, and domestic demand will likely remain stable. However, global demand can be unpredictable, and thus sustainability needs to be carefully managed. Box 4 provides a snapshot of the coconut industry in Sri Lanka.

BOX 4 Spotlight on the coconut sector

Coconut has evolved from a primary food crop to an industrial crop in recent years, as recognition of its health and nutritional benefits boosted global demand. Health-conscious customers, looking for an alternative to dairy and vegetable-based oil, have turned to products such as coconut to fill the gap. The diet fad and celebrity endorsements have helped boost demand for a variety of coconut products across the world.

This global trend has created opportunities for Sri Lanka, which is the world's fifth largest coconut producer. Coconut and coconut by-products make up 12 percent of all agricultural produce in Sri Lanka. Sri Lanka is best known for desiccated coconut and coconut oil; it is a market leader in desiccated coconut, which accounted for 18 percent of total export income in 2016. Export income from coconut and coconut-based products quadrupled between 2006 and 2016. Coconut production and processing is concentrated in the districts of Kurunegala, Puttalam, and Gampaha, which form the famous "coconut triangle." These districts in the North Western Province cover about 66 percent of total coconut acreage.

Demand for coconut-based products from outside of Sri Lanka has led to a growing number of industries in coconut manufacturing. Fresh coconuts have always been abundant in Sri Lanka but they are rarely used for purposes other than traditional cooking or hair care. Sri Lanka coconuts are less sweet than the varieties found in other Southeast Asian countries, but the oil is better suited for producing butter and spreads. Innovations such as those by the Coconut Research Institute, which created a variety of king coconut that retains the taste of coconut water for a shelf life of six months, have also helped exports.

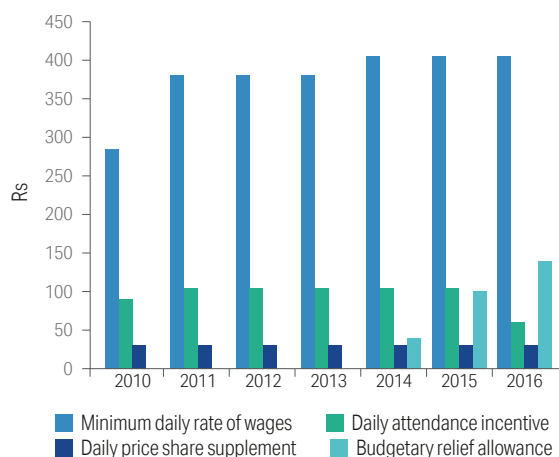
Expanded production, improved quality, and increased investments are needed to further benefit from this global trend, which can help increase agricultural incomes. Sri Lanka produced about 3 billion nuts in 2016, but nearly two-thirds of production went toward domestic consumption. Domestic demand tends to be inelastic, as coconut is an essential part of the traditional cuisine. The challenge will be to increase production above and beyond the stable demands of the domestic market. Securing cultivable land is key, and because coconut land tends to be flat, there is competition for suitable land from housing and real estate. The area within the coconut triangle, situated to the north and east of Colombo, is valuable real estate and therefore creates pressure for development. Unlike tea and rubber production, coconut production is mostly carried out by smallholder farmers, who face difficulties in raising the large investments required for the long coconut production cycle (five or more years) and for processing coconuts into higher-value-added products.

Sources: Based on Coconut Cooperative Blog 2017; Coconut Research Institute n.d.; Financial Times 2015; Roar Media 2016.

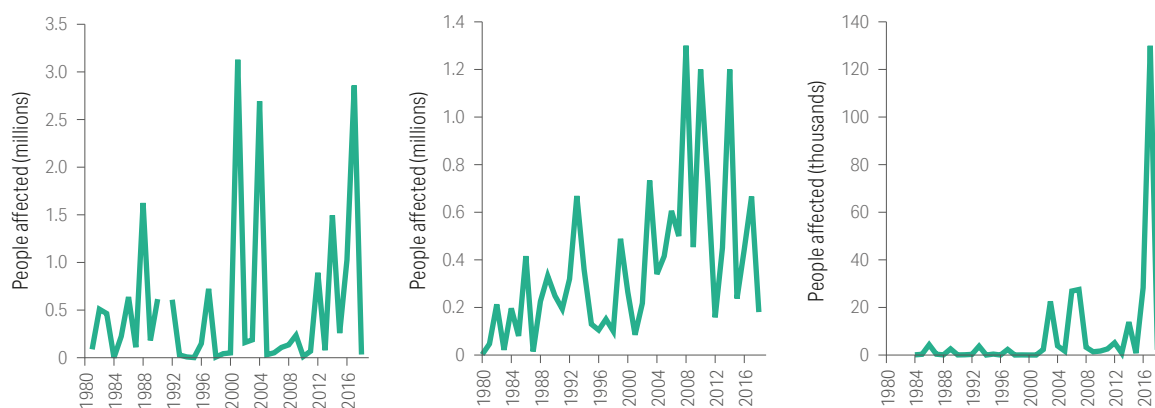
In the estate sector, poverty reduction was helped by increases in earnings, supported by the introduction of a budgetary relief allowance, among other things. The main source of income for estate residents is wage employment on plantations. Wage payments are governed by collective agreements between plantation firms and trade unions that stipulate four components of minimum wages: a minimum daily wage, a daily attendance incentive, a fixed-price share supplement, and a newly introduced budgetary relief allowance (figure 30). The minimum daily wage of plantation workers was raised substantially in 2009. The daily attendance wage is paid to workers whose attendance amounts to at least 75 percent of the number of days of work offered per month, excluding statutory holidays. However, despite this increase, wages remain very low, and are often below Rs 20,000 per month.

Finally, natural disasters have been occurring with increased intensity, introducing further volatility and constraining growth in the agricultural sector. Floods, droughts, and landslides have been occurring with greater intensity over the last decade (figure 31). The prolonged drought event that started in 2016 and lasted through a good part of 2017 was arguably the worst drought in 40 years, affecting almost 4 million people. The full impact of this event is likely not reflected in the latest survey because data collection took place in 2016 only. Widespread crop failure was reported during this time, which led to large income drops. The prices of staple food increased, and food security deteriorated significantly. This led households to resort to negative coping strategies, such as the sale of assets (WFP 2017). Better management of climate-related risks and enhanced resilience will be needed to reduce the impact of disasters on livelihoods.

FIGURE 30 Minimum wage rates in the estate sector, 2010–16



Source: Department of Labour 2016.

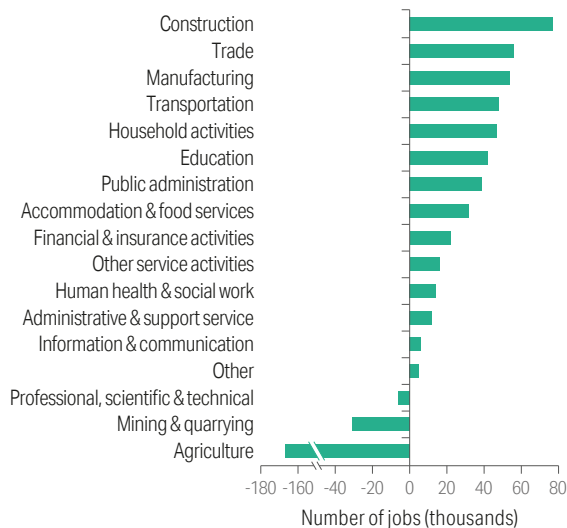
FIGURE 31 People affected by droughts (left), floods (center), and landslides (right), 1980–2016

Source: DesInventar database, <https://www.desinventar.net/>.

Recent trends in the nonagriculture sector: Growth in services underpinned by tourism sector

Recent economic growth boosted demand for labor, with many new jobs created in construction, followed by trade, manufacturing, and transportation. The construction sector added almost 80,000 jobs and led job creation between 2013 and 2016. Trade and manufacturing each added around 55,000 jobs, and the transport sector grew by 48,000 workers. Accommodation and food services added almost 32,000 workers (figure 32). Most of these sectors employ a disproportionately large share of low-skilled workers, which helped increase incomes of poorer households.

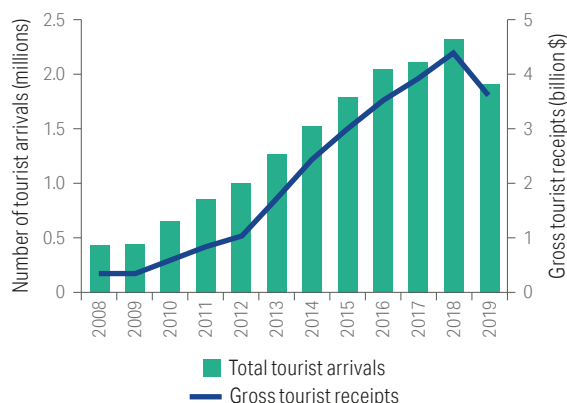
The tourism sector exhibited remarkable growth in the last decade and contributed to the expansion of the services sector. Sri Lanka enjoyed an impressive growth in the number of tourist arrivals, especially after 2012. The number of visitors surpassed 2 million in 2016, and gross tourism earnings amounted to \$4 billion in 2017 (figure 33). The sector is thus the third highest foreign exchange earner, after remittances and textiles/garments. The total contribution of tourism to GDP was estimated to be around 11.6 percent in 2017 (WTTC 2018).

FIGURE 32 Net job creation by sector (in thousands), 2013–16

Source: DCS, Labour Force Survey Annual Reports, 2013–16.

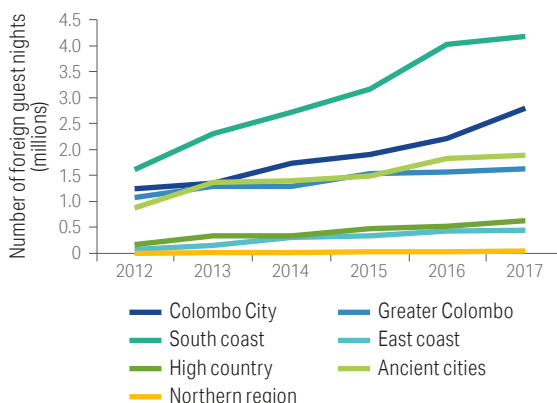
The rapid growth in the sector was facilitated by infrastructure investments that significantly reduced travel time. In particular, the completion of the Southern Expressway halved the travel time between Colombo and the southern coastal area. Tourist activities are increasingly concentrated in and around Colombo and the Southern Province: Colombo remains the main port of entry, and the towns along the southern coast are known for their beautiful beaches and idyllic scenery. Tourism activities also spread more broadly across the country, such as to the High Country and near the ancient cities. The number of overall guest nights in the Northern and Eastern Provinces is very low, accounting for less than 5 percent of the total (figure 34).

FIGURE 33 Tourist arrivals and gross tourist receipts, 2008 – 17



Source: Central Bank, "Economic and Social Statistics of Sri Lanka," various years.

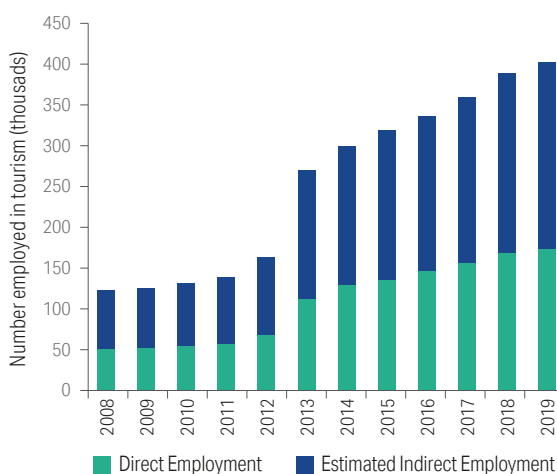
FIGURE 34 Foreign guest nights in graded accommodation establishments, by region, 2012 – 17



Source: Central Bank, "Economic and Social Statistics of Sri Lanka," various years.

The tourism industry has potential to accelerate poverty reduction, as it makes intensive use of low-skilled workers, requires relatively low investment, and can particularly benefit the rural population. As Sri Lanka's popularity as a tourist destination grows, the tourism sector is increasingly an important contributor to job creation. The estimated sum of direct and indirect employment in the tourism industry increased from about 162,000 in 2012 to over 400,000 in 2019 (figure 35). The sector has large job creation potential: it can provide flexible, part-time jobs to rural and urban populations, and thus could particularly benefit women and help increase Sri Lanka's persistently low female labor force participation. As a labor-intensive industry,

FIGURE 35 Employment in the tourism industry, 2008 – 17



Source: Central Bank, "Economic and Social Statistics of Sri Lanka," various years.

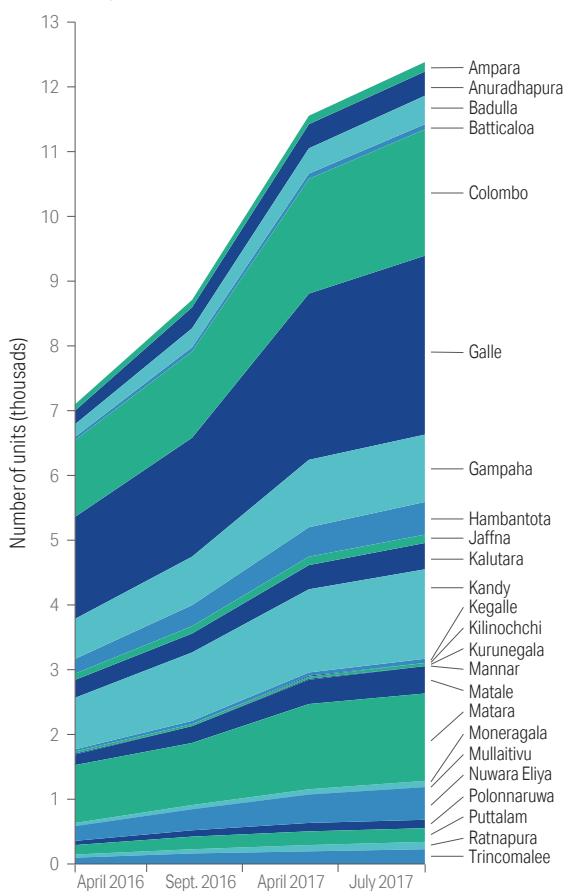
tourism provides a range of different employment opportunities across the skills spectrum, including the less-skilled and unskilled segments of the labor force, such as youth.

In addition, tourism-related activities could help households complement their primary source of livelihood, especially in rural areas. Tourism tends to thrive in places that have a warm climate, rich cultural heritage, inspiring landscapes, and abundant biodiversity—factors that are particularly apparent in Sri Lanka’s rural areas. Tourism has a long and diversified supply chain, as it includes many different output activities and inputs. Spending by tourists can benefit a wide range of sectors such as small-scale agriculture, handicrafts, transport, and other services, all of which can directly contribute to poverty reduction. The role of the “sharing economy” has also become more prominent in Sri Lanka, as seen from the rising number of Airbnb rental units available in key tourist destinations (figure 36) and the wide availability of ride-sharing services such as Uber and Pickme.

Meanwhile, some of the jobs created in the transport sector were the result of increased demand for alternative transport services. Buses are the main modality of mass transportation in Sri Lanka. Public buses command about 40 percent of the market share in urban areas and 60 percent in rural areas. While bus fares are very affordable, service is known for being slow and inefficient, with long wait times and frequent accidents. Safety concerns have been raised by female commuters. Private bus services suffer from similar issues. This has led to a shift toward heavier use of private and paratransit vehicles, including personal cars and three-wheelers, contributing to employment expansion in the transport sector.

This trend has helped employ a large number of low-skilled, prime-age men; the longer-term challenge will be to better invest in the skills of this workforce while at the same time improving the availability and quality of transport services. The market served by three-wheelers has been expanding, owing to their ready availability and flexibility. Three-wheelers have helped fill a gap in transport

FIGURE 36 Airbnb offerings by district, April 2016–July 2017



Source: Airbnb data from <http://tomslee.net>.

services, with their numbers exceeding 1 million as of 2017,¹⁷ but this growth has also led to congestion and traffic safety issues. A recent study showed that most three-wheeler drivers have low levels of education (IPS 2019), and they constitute part of Sri Lanka's large informal workforce. The challenge will be to increase the skills and employability of prime-age job seekers, improve job matching, particularly given persistent labor shortages in many sectors (DCS 2017b), and offer wages and working conditions that can attract youth as well as middle-aged men to these jobs.

Trends in nonlabor income: Localized impacts of Samurdhi and remittances

Nonlabor income generally consists of transfers from public or private sources. Public sources generally include payments from social protection programs, such as payments from social assistance programs, elderly support, or disability payments, while private sources mainly comprise remittances from family members or relatives outside of the household. In Sri Lanka, the two most significant sources of transfers are from the flagship social assistance program, Samurdhi, and remittances received from a large contingent of migrants working abroad.

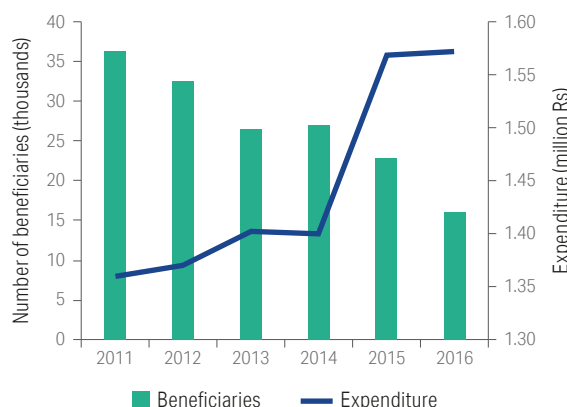
Samurdhi, Sri Lanka's largest poverty alleviation program, is an integrated welfare program that provides cash transfers, food stamps, and housing assistance. The cash transfer component is a means-tested program that bases eligibility on self-reported income. However, the income-based cutoffs are not easy to implement, given high rates of informal employment; and much discretion is applied in practice (Walker 2018). Moreover, reliance on manual registration and a weak beneficiary identification system have resulted in poor coverage and targeting.

The Samurdhi program underwent a significant expansion in 2015, which led to large increases in benefit amounts. The annual program expenditure almost tripled, from about Rs 15 billion to Rs 40 billion, between 2014 and 2015 (figure 37). The increase in coverage was comparatively limited, from 42 to 45 percent of the poor according to the national poverty line (figure 38). Most resources were used to increase the benefit amounts of existing beneficiaries. In fact, not only were all the Samurdhi benefit brackets at least doubled—from Rs 210, Rs 750, Rs 1,200, and Rs 1,500 to Rs 420, Rs 1,500, Rs 2,500, and Rs 3,500—but the share of beneficiaries receiving higher values also increased significantly. The number of beneficiaries in the lowest bracket decreased by 6 percent, in the next higher bracket by 56 percent, and in the second highest bracket by 7 percent, whereas the number in the highest bracket increased from 14,889 to 594,594. The appendix shows the number of beneficiaries by province and by benefit category.

17. Not all three-wheelers are used for the purpose of providing transport services to others. The Economic Census 2013/14 conducted a separate sample survey, which revealed that about 47.2 percent of all three-wheelers were used for passenger transport, followed by 35.9 percent used for household purposes (DCS 2017a).

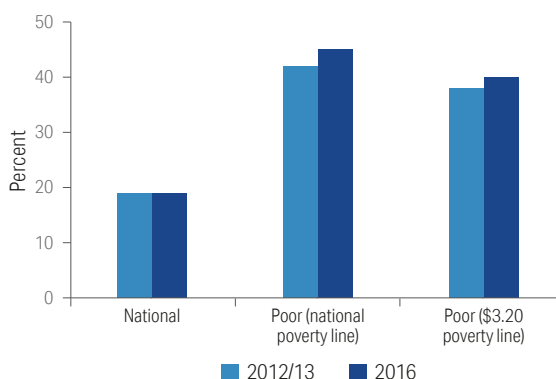
Average benefit levels among beneficiaries increased from around Rs 770 to Rs 2,580, according to estimates from the 2016 HIES data. However, benefit amounts are still largely inadequate and are not indexed to inflation, which means that they continue to erode as prices in the economy rise.

FIGURE 37 Samurdhi budget and beneficiaries, 2011 – 16



Source: Department of Divineguma Development 2014, 2015, 2016.

FIGURE 38 Coverage of the poor by Samurdhi, 2012/13 and 2016



Source: Staff calculation using HIES 2012/13 and 2016.

Note: Y-axis is truncated.

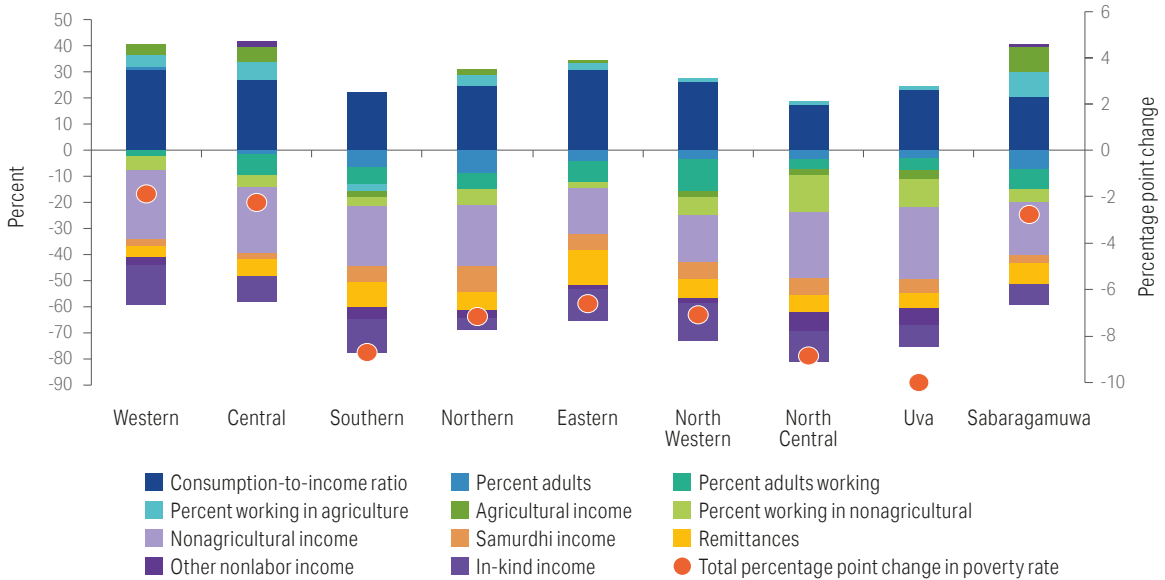
Despite high poverty rates, only 8 percent of the estate population was covered by Samurdhi in 2016.

In rural and urban areas, where poverty rates were much lower, the program covered 21 and 12 percent of the population, respectively. Moreover, the average benefit received was significantly lower in the estate sector, than in urban or rural areas. It was previously suggested that the likelihood of enrollment in the Samurdhi program is lower in the estate sector because Samurdhi officers rarely visit the estates (World Bank 2017).

The targeting performance of the program remains weak, even after the program's expansion. About 40 percent of the poor according to the \$3.20 poverty line receive assistance from Samurdhi, whereas the share among nonpoor households was 16 percent. (Under the national definition of poverty, the shares are 45 percent of the poor and 18 percent of the nonpoor). Among the poorest 10 percent of households in which at least one member receives Samurdhi, average monthly benefit levels are Rs 2,423, equal to about 12 percent of monthly consumption for these households.

Weak targeting of the poor leads to low effectiveness in reducing poverty and sends a large share of public resources to the nonpoor. The contribution of Samurdhi to poverty reduction was analyzed using the decomposition method presented in section 3.1, applied at the province level. In all provinces, non-farm income was the most important contributor to poverty reduction (figure 39). Samurdhi's role was overall modest with the exception of the Northern Province, where it was the second most important factor contributing to poverty reduction.

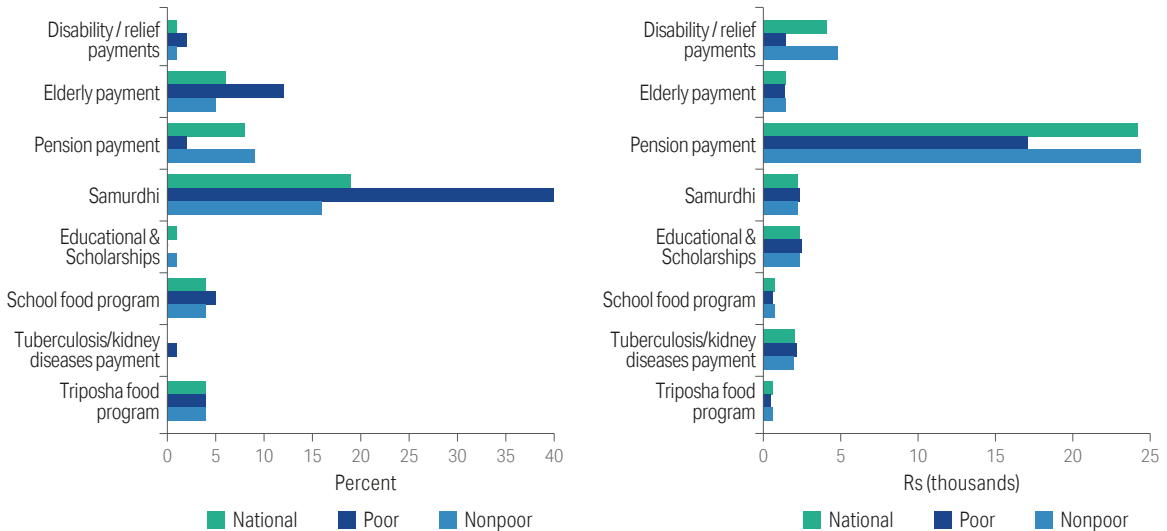
FIGURE 39 Contribution of demographic and socioeconomic factors to poverty reduction, by province



Source: World Bank staff calculation using HIES 2012/13 and 2016.

The targeting performance and benefit levels of other social protection programs remain low (figure 40). Besides Samurdhi, there is a range of other welfare programs: pensions, disability payments, elderly payments, disease payments, a school food program, the Triposha food program, and scholarships.

FIGURE 40 Coverage (percent, left) and monthly benefit levels (Rs, right) of social protection programs



Source: World Bank staff calculation using HIES 2016.
 Note: Benefit levels indicate amount received per month.

Targeting performance is low, as most of these programs reach less than 10 percent of poor households. For example, less than 12 percent of poor households received elderly payments in 2016. A large share of public resources allocated to welfare programs continue to go to the nonpoor. Pensions are more likely to be received by rich households than by poor: only 2 percent of the poorest 10 percent receive pension benefits, compared to 18 percent of the richest 10 percent. This finding is not surprising, given that pensions are an entitlement mainly reserved for formal public sector workers. Benefit levels are also inadequate for all programs except pensions, which provide average benefits of Rs 24,187 per month.

Undercoverage is more than 40 percent and leakage is over 80 percent for all social assistance programs. Undercoverage, defined as the percentage of the poor not receiving a transfer, was 44 percent in 2016. Leakage is defined as the receipt of transfers by nonpoor beneficiaries. For social assistance programs overall, leakage is 73 percent in terms of number of beneficiaries and 66 percent in terms of transfer amount. The targeting differential, defined as the difference between coverage rate of the poor and the participation rate of the nonpoor, is estimated to be 16 percent.

Social assistance programs have a modest impact on poverty reduction. This result is simulated by estimating the poverty rate in the absence of the relevant transfer, assuming that household welfare will diminish by the full value of the transfer. Compared to a baseline \$3.20 poverty rate of 11 percent in 2016, eliminating all social assistance programs would result in a small increase in poverty, raising it to 13 percent. In the absence of all social protection programs (including pensions), poverty would increase to 15 percent.¹⁸

Given Sri Lanka's aging demographic profile, there are increasing concerns about income support for the elderly. The share of the elderly (individuals ages 65 and above) is projected to surpass 20 percent of the population by 2045, up from 11 percent in 2020.¹⁹ Elderly poverty was 10.8 percent in 2016, similar to the national average. More than 60 percent of the elderly live with their children. Only about 7 percent live alone, and the poverty rate for this group is low (table 9). There are concerns about the lack of formal income support schemes—the coverage of elderly payments is low, and there is

TABLE 9 Living arrangements of the elderly

Living situation	Share (%)	\$3.20 Poverty rate
Alone	6.9	4.7
With spouse	15.7	7.6
With other elderly (not spouse)	1.6	8.4
With children	60.7	12.3
With other relatives	14.9	11.6
With others	0.2	18.0
All elderly	100.0	10.8

Source: World Bank staff calculation using HIES 2016.

18. Estimates of undercoverage, leakages, and the impact of programs on poverty measures were provided by the World Bank data compilation ASPIRE: The Atlas of Social Protection Indicators of Resilience and Equity, <http://datatopics.worldbank.org/aspire/>, which is gratefully acknowledged.

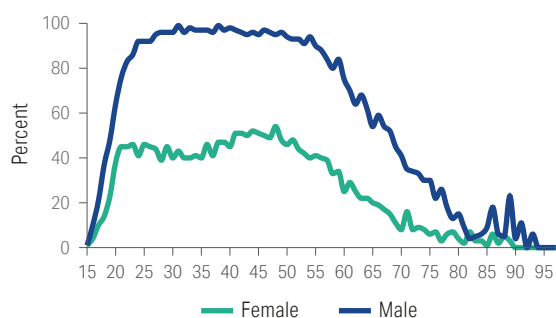
19. Estimates are from United Nations population projections (median variant), <https://population.un.org/wpp/Download/Standard/Population/>.

otherwise little available in the way of old-age income support. The elderly benefit provides Rs 2,000 per month to individuals ages 70 and above with no income; but the benefits reach only 19.1 percent of the target population. The benefit amount is less than half of the already low national poverty line and unlikely to offer effective relief. The coverage of pensions remains low outside of the public sector, where employees are entitled to noncontributory pensions.

Beyond strengthening social protection, encouraging longer working lives among the elderly can help prevent them from falling into poverty. Male labor force participation increases steeply until age 25, after which it remains at around 95 percent until it drops precipitously at around age 55. Those working in the agriculture sector tend to remain in the labor force longer than others. Women exit the labor force even sooner, after reaching peak participation around age 45 (figure 41).²⁰

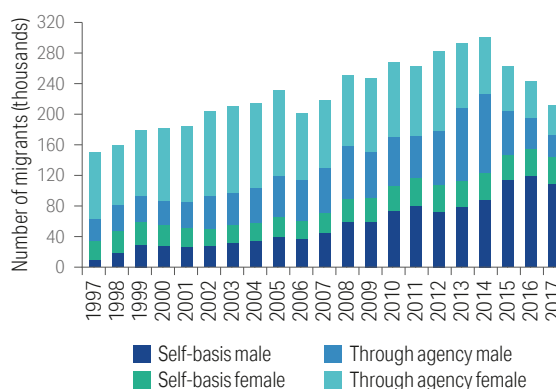
Remittances are an important source of income for some poor households, and there have been notable changes in migration trends in recent years. Sri Lanka has historically been a migrant-sending country, though the skills and gender composition of migrants are undergoing structural changes amid a decline in departures. Figure 42 shows annual departures for foreign employment by gender and route of employment (self-basis or through agency) between 1997 and 2017. The annual outflow of migrants continued to rise through 2014, when it surpassed 300,000, but has since been falling rapidly. Housemaids have made up a large share of all migrants, but their numbers have been decreasing since 2005. Generally speaking, such a decline is to be expected; as Sri Lanka's economy grows and living standards improve, there is a narrowing of the expected wage gap between Sri Lanka and the destination country.

FIGURE 41 Male and female labor force participation, by age



Source: World Bank staff calculation using HIES 2016.

FIGURE 42 Number of migrants, by gender and route of employment, 1997 – 17



Source: Sri Lanka Bureau of Foreign Employment.

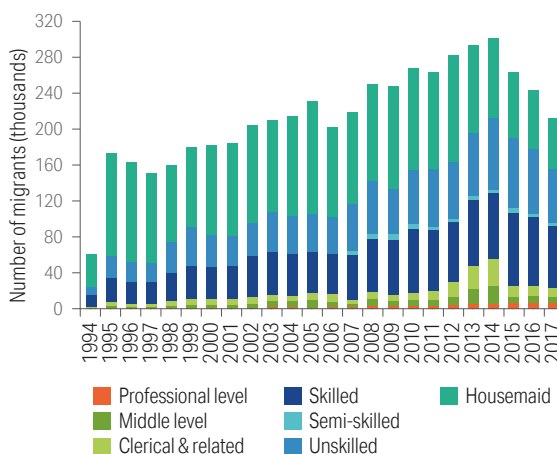
20. While these figures are not derived from panel data, which would offer a more accurate life-cycle perspective, the patterns of early labor market exit appear to have held over time. Calculations with earlier rounds of the HIES show similar patterns.

Several trends have emerged more recently: (1) there has been a rapid decline in overall departures since 2013, which is mainly due to a decline in the number of female migrants; (2) migrants are increasingly more likely to find employment opportunities on their own compared to other routes, though the trend is much stronger among male migrants; and (3) both men and women have been less likely to find employment through agencies in recent years.

These trends are likely the result of institutional and structural factors, the impact of which will need continued monitoring. In 2013, the Sri Lanka Bureau of Foreign Employment introduced a Family Background Report (FBR) requirement in an attempt to restrict labor migration of women with young children. The new regulation was strictly enforced and led to an immediate drop in the number of women migrating overseas to work as housemaids.²¹ Meanwhile, the decline in the number of male agency-led migrants could be the result of lower demand for low-skilled labor in the Middle East. Finally, migrants increasingly possess better skills (figure 43).

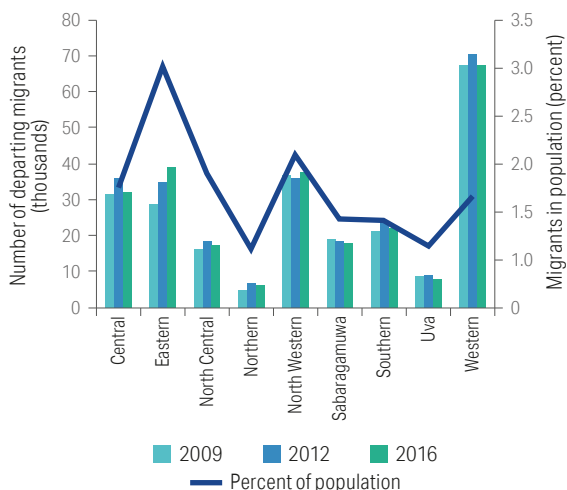
An increasing number of migrants has been coming from the Eastern Province in recent years, which helped reduce poverty among household members left behind. Most migrants are still from the populous Western Province, but migrants from the Eastern Province increased by 35 percent between 2009 and 2016. This trend likely reflects a lack of job opportunities (figure 44). Total remittances received as a share of GDP remained at slightly below 9 percent between 2012 and 2016, and had a relatively modest impact on overall poverty reduction (figure 25). However, among households in the Eastern Province, remittances were

FIGURE 43 Number of migrants by skill level, 1994–2017



Source: Sri Lanka Bureau of Foreign Employment.

FIGURE 44 Number of departing migrants by province of origin, for 2009, 2012, and 2016 compared to migrants as share of provincial population in 2016



Source: Sri Lanka Bureau of Foreign Employment; population figures from DCS 2012b.

21. The policy has reportedly led to an increase in cases of human trafficking of women who tried to circumvent the regulation; there are concerns about the effectiveness of the policy in safeguarding the welfare of children left behind (ILO 2018).

the second biggest factor contributing to poverty reduction (figure 39), which is consistent with the migration trend observed.

The migrant-sending strategy may have been a survival strategy for some poor households, but it has not come without a cost. In-depth interviews in ILO (2018) suggest that female migrants continue to look for opportunities overseas to finance the building of a house and to meet education and health needs of their children. In households that have a male migrant, women's vulnerabilities are intensified by the breakdown of families, which leaves women caring for their children with little to no financial support from their husbands. This trend is particularly worrying in former conflict-affected areas, where there are a lot of female-headed households.



4

**Key messages and priorities
for poverty reduction
and shared prosperity**

Poverty continued to decline in Sri Lanka through 2016, and prosperity was being created and shared.

Between 2012/13 and 2016, Sri Lanka observed significant progress in poverty reduction. The poverty rate according to the \$3.20 poverty line declined from 16.2 percent in 2012/13 to 11 percent in 2016. Moreover, the depth of poverty also fell, implying an improvement among the poorest of the poor. Sri Lanka's poverty rate compares favorably with poverty rates in peer countries.

Encouragingly, improvements in labor income were the main driver of the progress in poverty reduction, and these continued during a period of important structural changes at the sector level.

Sustained economic growth translated into better labor market outcomes in the form of higher employment and wages. In a notable shift from previous years, the contribution of agriculture to rural incomes declined, as favorable price trends reversed and productivity stagnated. During the same period, most jobs were created in transport, commerce, and construction, which helped lift the earnings of the less skilled and less well-off. Samurdhi underwent a significant expansion in 2015, but coverage did not change much, and the contribution to poverty reduction was relatively modest. Remittances played a small role compared to other factors, but have provided important support to some poor households.

Overall, limited progress in meeting structural labor market challenges poses a concern for longer-term progress in poverty reduction and shared prosperity.

Many of the new jobs are of low productivity and in sectors with high levels of informality. There was little progress in raising the labor force participation among women. Participation is almost on par with men for highly educated women (those with a tertiary education) but significantly lower at all other educational attainment levels. Given the high burden of household chores and child care, the opportunity cost of working is high, and the challenges are compounded by the difficulties of finding a decent, well-paying job. A large share of the net employment growth among women came from increased employment in the public sector.

The following key areas should be the focus of efforts to accelerate job creation and poverty reduction:

- **The creation of more and better jobs is a key priority.** Accelerating growth and poverty reduction needs to rely on productivity and employment growth that can support broad-based income growth. Labor productivity has been growing strongly but most of the growth came from increases in within-sector productivity and little from reallocation effects. This implies that most of the labor movement occurred from agriculture toward other sectors with low productivity. Supporting the movement of workers toward sectors with higher productivity is important to further promote productivity gains, especially given that progress has slowed in recent years. Accelerating labor reallocation—for example through reducing barriers to internal migration—would also help, as would creating a policy environment that promotes competitiveness and job creation.

- **Measures to increase agricultural productivity will help reduce poverty.** Agricultural households have a higher poverty rate due to low productivity and low earnings in the sector. Support to increase paddy productivity and help farmers shift to higher-value crops can help improve rural livelihoods and reduce poverty.
- **Stronger safety nets are needed to protect the poor and vulnerable.** Social protection programs could be better targeted to further reduce poverty. Only a small share of estate households is covered, even though the poverty rate is much higher in this sector. Benefit levels remain inadequate. Efforts to build better targeting and delivery systems and strengthen graduation programs can go a long way toward supporting the poor and most vulnerable.
- **Narrowing the gap in access to basic services will help achieve equal opportunities for all.** Sri Lanka has made great progress in closing the gaps in access to services, but large challenges remain in some areas, such as access to water supply. Spatial disparities are high—between urban and rural areas, and between the Western Province and the rest of the country—and contribute to inequality. While Sri Lanka has historically excelled in human capital outcomes, the gap between the poor and nonpoor is wide, and tertiary educational attainment is very low. Progress was slow in the estate sector, where poverty continues to be much higher, and educational and nutritional outcomes much lower, than in the rest of the country.

Finally, a revision of the official national poverty line, accompanied by a more accurate classification of geographic sectors, would help reflect the true extent of poverty and vulnerability. The current benchmark for measuring poverty was established almost two decades ago and needs to be revisited to reflect the consumption patterns of today. Similarly, the current definition of geographic sectors relies on administrative boundaries, and several recent studies have shown that official statistics likely underestimate the actual extent of urbanization. Better data and estimates will enhance our understanding of the patterns of poverty and vulnerability, and thus help in devising better interventions.

Appendix

Number of Samurdhi beneficiaries by allowance category and district, 2014 and 2015

District	2014				2015			
	Rs 210	Rs 750	Rs 1,200	Rs 1,500	Rs 420	Rs 1,500	Rs 2,500	Rs 3,500
Colombo	1,787	48,650	0	237	14,268	214,945	9,339	17,012
Gampaha	7,731	106,481	4,273	315	74,349	414,593	22,260	45,417
Kalutara	6,241	46,033	11,748	115	64,063	23,711	10,995	21,804
Kandy	7,944	61,041	21,002	114	74,409	30,972	15,071	33,807
Matale	3,330	35,743	3,466	194	34,087	15,803	7,862	14,965
Nuwara Eliya	8,124	24,946	6,617	15	84,065	12,419	6,031	13,126
Galle	8,250	55,284	9,126	53	74,893	20,246	11,806	31,254
Matara	4,982	50,076	12,799	32	44,527	23,227	11,137	26,399
Hambantota	6,830	26,812	21,520	5	64,397	14,660	9,772	23,952
Jaffna	0	38,873	10,374	4,660	0	13,418	9,205	31,283
Mannar	0	2,636	7,875	2,655	0	3,020	2,307	7,839
Vavuniya	2,805	8,234	846	102	24,759	2,822	1,599	4,829
Mullaitivu	44	2,088	7,198	1,714	44	1,926	2,614	6,530
Kilinochchi	0	3,109	6,059	2,565	0	2,716	2,050	6,968
Batticaloa	17,296	62,143	84	2	164,502	19,764	10,269	32,677
Ampara	14,324	57,720	2,858	108	134,960	20,742	10,404	29,336
Trincomalee	8,175	28,385	2,208	600	74,330	10,218	5,899	15,602
Kurunegala	9,338	120,091	20,030	485	84,555	51,155	27,581	58,440
Puttalam	1,752	38,034	15,671	15	14,559	22,123	9,446	20,959
Anuradhapura	5,671	48,124	8,743	474	54,245	23,020	11,507	22,050
Polonnaruwa	4,484	21,742	3,235	112	44,304	7,691	5,781	11,241
Badulla	6,419	27,553	22,956	45	64,087	18,608	9,699	22,126
Moneragala	7,397	30,445	9,209	96	74,306	12,656	8,045	18,677
Ratnapura	12,311	56,983	42,419	143	114,504	25,974	20,698	51,572
Kegalle	8,881	37,866	21,428	33	84,382	19,214	11,869	26,729
Total	154,096	1,039,092	271,734	14,889	145,595	459,643	253,246	594,594

Source: Department of Divineguma Development 2014, 2015, 2016.

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