

Poverty Profile in Lao PDR

Poverty Report for the Lao Expenditure
and Consumption Survey 2018-2019





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Foreword

The Lao Statistics Bureau (LSB) has conducted the Lao Expenditure and Consumption Survey (LECS) at five-year intervals since 1992/93. The sixth and most recent round (LECS 6) was implemented between June 2018 and May 2019 with full funding from the Government of Lao People's Democratic Republic (Lao PDR). The objective of the surveys is to assess the living standards of the population and generate necessary data for socioeconomic planning. The LECS is the primary source of official poverty statistics in Lao PDR, providing critical information for monitoring progress on poverty reduction, identifying poor and vulnerable groups, and ultimately informing government policies for poverty eradication.

This report is designed to provide a basic understanding of the poverty situation in Lao PDR. It was produced as a joint effort between the Lao Statistics Bureau and the World Bank – a collaboration motivated by the need to strengthen poverty monitoring in order to assess progress on poverty reduction and contribute to evidence-based policy making in Lao PDR. The World Bank's technical assistance to the LSB supported the data analysis and report-writing.

The report provides updated poverty statistics based on the LECS 6 data and revised poverty methodology. Previous poverty estimates between 1992/93 and 2012/13 are based on the poverty methodology which was established

in 1997/98. The revision of the poverty methodology allows poverty measures to better reflect the current living standards and spending patterns of the Lao PDR population.

The report presents an overview of poverty and changes in poverty levels over the six-years period between 2012/2013 and 2018/2019. It also describes the geographical pattern of poverty and the profile of the poor by breaking down the incidence of poverty alongside socioeconomic characteristics such as education and economic activity. A range of non-monetary welfare indicators including household asset ownership, housing conditions and access to basic services are also presented to create a comprehensive picture of people living in poverty.

Amid the unprecedented challenges posed by the coronavirus pandemic and the resulting global economic downturn, protecting the poor and the vulnerable from falling deeper into poverty is essential to maintaining momentum towards sustainable poverty reduction in Lao PDR. The analysis presented in this report not only provides a benchmark for monitoring progress in reducing poverty in the future, but also helps identify and locate the existing poor and vulnerable population. The economic hardships caused by the pandemic worldwide also reinforce the findings of this report, which point to the importance of fostering inclusive growth in order to link economic growth more strongly to poverty reduction.

We would like to thank all staff in the central and provincial offices who implemented this survey, as well as the sample communities, village chiefs and households, for their cooperation throughout. Thanks is due to the LSB team comprising Vilaysouk Sisoulath (Deputy Director General, Social Statistics Department), Phetsavanh Boutlasy (Director, Research and Analysis Division, Social Statistics Department), Somsamay Norasane (Technical staff, Research and Analysis Division, Social Statistics Department) and staff from the Social Statistics Department and Economic Statistics Department who contributed to the data preparation and analysis for the report. We would like to extend thanks to Obert Pimhidzai (Senior Economist, World Bank), Tanida Arayavechkit

(Economist, World Bank) and Andrés M. César (Consultant, World Bank) for preparing this report. Finally, we thank Thirakha Chanthalanouvong (Director General, Social Statistics Department, LSB) and Rinku Murgai (Practice Manager, Poverty and Equity Global Practice, World Bank) for supervising this work.

We believe that the findings of this report will provide useful insights to policy makers. Designed to create a basic understanding of the poverty situation in Lao PDR, the report lays a foundation for further investigation of factors driving poverty nationwide and the factors behind the observed patterns and trends, in order to inform government policies and the national development agenda.



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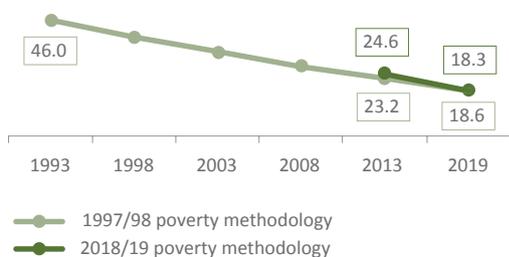
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Snapshot of poverty in Lao PDR

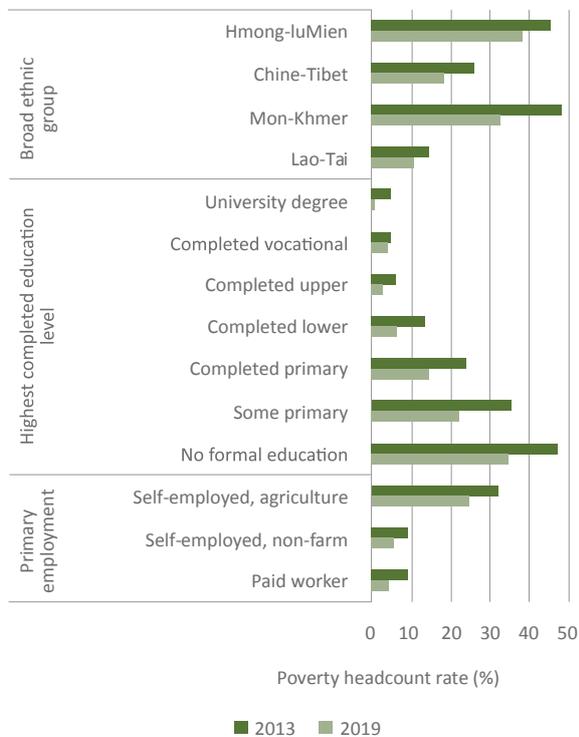
Poverty headcount rate 1993-2019 (percent)



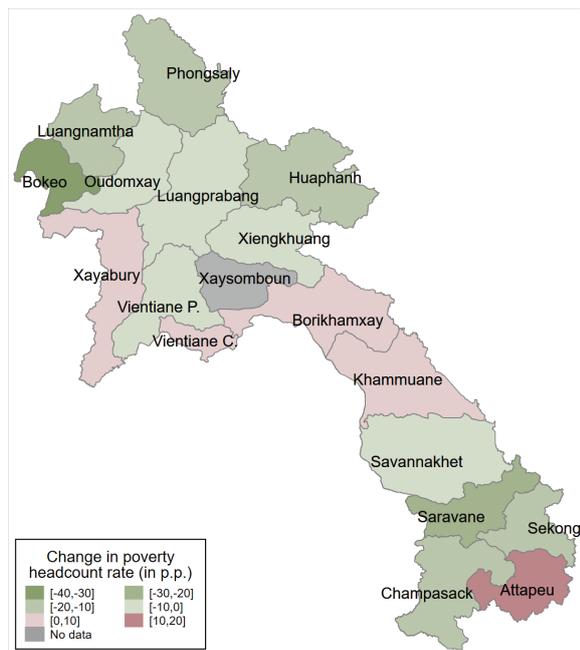
Poverty headcount rate 2019 (percent)



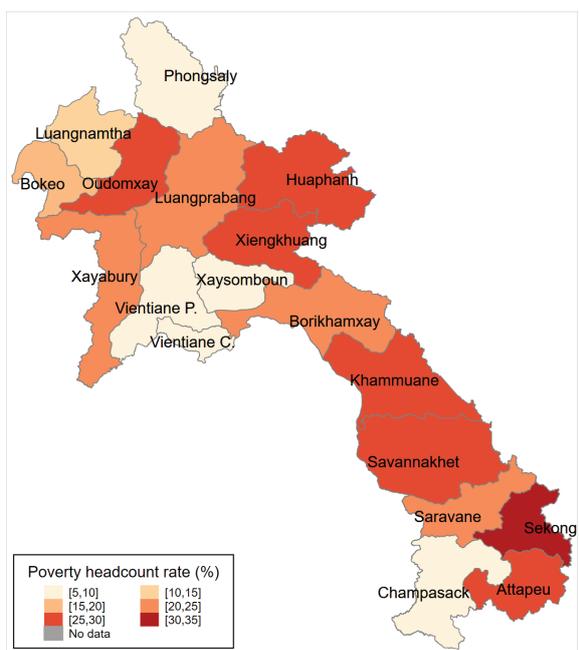
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Key findings

The Lao Expenditure and Consumption Survey (LECS) has been conducted at five-year intervals since 1992/93. The sixth and most recent round (LECS 6) was implemented between June 2018 and May 2019. This poverty report provides updated poverty statistics based on the LECS 6 data and its revised poverty methodology, which benchmarks poverty against the living conditions and spending patterns of the current Lao PDR population.

Poverty declined from 24.6 percent in 2012/13 to 18.3 percent in 2018/19. The rate of poverty reduction has been rapid in rural areas, while urban poverty reduction has stagnated.

Disparities across regions and provinces have narrowed. The northern and southern provinces experienced a rapid reduction in poverty, except in Attapeu province. Poverty reduction has stagnated in central Lao PDR, previously the wealthiest region.

Inequality has risen due to widening consumption gaps within regions. Consumption grew at a faster pace among the better off. Both factors contributed to a slower pace of poverty reduction relative to growth.

The geography of poverty has shifted toward urban areas and the central region, although rural areas are still home to the overwhelming share of the poor.

Five provinces account for more than half of the poor in Lao PDR: Savannakhet (20.6 percent), Oudomxay (8.7 percent), Khammuane (8.3 percent), Saravane (8.0 percent) and Luangprabang (7.7 percent).

The incidence of poverty is typically higher among agricultural households, Hmong-lumien households and households headed by a person who has not completed lower secondary education or an unemployed person, and such gaps have widened.

Multidimensional poverty declined between 2012/13 and 2018/19, especially in rural areas, the northern region and the southern region, mirroring a decline in monetary poverty.

Notwithstanding improvements in monetary indicators of poverty and non-monetary aspects of household welfare, food insecurity remains a pressing problem among low-income households in rural areas.



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Introduction

The Lao Expenditure and Consumption Survey (LECS) has been conducted at five-year intervals since 1992/93. The sixth and most recent round (LECS 6) was implemented between June 2018 and May 2019, following the LECS 5, which was conducted between April 2012 and March 2013. The objective of the surveys is to assess the living standards of the population and generate necessary data for socioeconomic planning. The LECS is the primary source of official poverty statistics in Lao People's Democratic Republic (Lao PDR), providing critical information for monitoring progress on poverty reduction, identifying poor and vulnerable groups, and ultimately informing government policies for poverty eradication.

The poverty report for LECS 6 provides updated poverty statistics based on the LECS 6 data and the revised poverty methodology. Previous poverty estimates are based on the poverty methodology which was established in 1997/98. The revision allows poverty measures to better reflect living standards and spending patterns of the current Lao PDR population. Detailed findings on other socio-economic factors covered in the LECS 6 survey are provided in the LECS 6 survey report (LSB forthcoming 2020) and hence will not be covered in this report. Poverty statistics between 2002/03 and 2012/13 based on the old poverty methodology can be found in the poverty report for LECS 5 (LSB and World Bank 2014).

LECS 6 Survey

Survey design. The sample size of LECS 6 consists of 10,144 households from 634 villages. The first stage of sampling consists of identifying a selection of sample villages using the probability proportional to size (PPS) sampling method. Villages are grouped by province and village type (urban, rural area with road access and rural area without road access). The number of sample villages in each province is between 25 and 46, depending on the number of villages and households in each survey area. In the second-stage sampling, 16 households are selected in each sample village.

Survey instrument. LECS 6 consists of five main sets of questions (modules):

- i) Diary – on the daily expenditure and consumption of the household
- ii) Household questionnaire—on the household's situation, including employment, health, income, housing, and business activities
- iii) Time used – on the time allocation of the household in daily activities
- iv) Prices – on prices in the market and village shops; and
- v) Village questionnaire – questions concerning the village for the village chief.

The household questionnaire in turn comprises 15 modules, including household composition, parents of each household member, education, employment, migration, nutrition, asset ownership, housing conditions, construction activities, household business, agricultural activities health, purchases of durable goods, income and transfers, and borrowing and lending.

Daily expenditure and consumption of the household are collected using a 14-day diary in LECS 6, marking a change from the 30-day diary used from LECS 1 to LECS 5. The number of transactions recorded by households typically declined over the 30-day diary period, suggesting that a shorter diary period would improve data reliability. However, the change to a 14-day period means that poverty estimates between LECS 6 and LECS 1-5 are not strictly comparable. To mitigate this impact, the change to the diary period was implemented alongside the collection of 30-day diary data from a smaller sample to reconcile survey estimates over time (Table 1). Of the total of 10,028 responding households, consumption expenditure of 8,457 households was recorded using a 14-day diary and consumption expenditure of 1,576 households was recorded using a 30-day diary. This allows for a comparison of trends in a consumption aggregate before and after the change in methodology.

Data collection. Fieldwork was conducted for 12 months between 1 June 2018 and 31 May 2019. The LECS data was collected for the first time using computer-assisted personal interviews (CAPI). The method has been proven to speed the processing and release of the data.

TABLE 1: DISTRIBUTION OF THE LECS 6 SAMPLE (NUMBER OF HOUSEHOLDS)

Province	Urban	Rural with road	Rural with road	Total
Vientiane Capital	576	160	160	736
Phongsaly	96	288	288	480
Luangnamtha	144	304	304	496
Oudomxay	144	336	336	560
Bokeo	176	288	288	496
Luangprabang	208	336	336	624
Huaphanh	80	288	288	544
Xayabury	256	352	352	608
Xiengkhuang	160	320	320	528
Vientiane	208	416	416	624
Borikhamxay	192	336	336	544
Khammuane	144	432	432	624
Savannakhet	160	544	544	736
Saravane	80	464	464	608
Sekong	160	160	160	416
Champasack	176	448	448	688
Attapeu	176	256		432
Xaysomboun	128	272	0	400
Lao PDR	3,264	6,000	880	10,144

Note: Due to the collapse of the Xe Pian-Xe Namnoy dam, two villages in Attapeu province, one with road access and the other without road access, were not accessible during the survey period. The non-response rate was 1.2 percent, resulting in a final sample size of 10,028 households.



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Revised poverty methodology

The 2019 poverty profile is based on the revised poverty methodology to better reflect changes in living standards and spending patterns, in line with best practice. Previous poverty estimates are based on the poverty methodology which was established in 1997/98. Since then, robust growth and broad policy reforms have transformed the lives of Laotians and changed household spending. Nonfood items have also become more diverse and cheaper. Access to services and infrastructure has expanded, broadening the range of assets and durable goods available to the broader population. As such, poverty measures needed to be rebased to align them with the minimum basic needs of a contemporary Lao household, and the consumption aggregate required updating to reflect spending patterns among the population of Lao PDR in 2019.

There are two major differences to the revised consumption aggregate. First, the new consumption aggregate includes a larger variety of durable goods to reflect the growing importance and availability of household appliances and assets, including cellular phones, washing machines, cars, motorcycles, stoves,

refrigerators and air conditioners. Second, the new consumption aggregate includes housing rents. Dwellings themselves have become a major asset of Lao households, with the dwelling's value reflecting living conditions and access to services. Rents are imputed for households using a hedonic regression that estimates the rental value of dwellings based on the dwellings' characteristics and location.

The new poverty lines are constructed using LECS 6 (2018/19), using the cost of basic needs approach. They reflect the food and nonfood consumption patterns of the population in 2019. The food poverty line is derived from a food basket of 2100 calories per day among the reference poor population. A nutrient conversion table (NCT) adopted by the Food and Agriculture Organization (FAO) for Lao PDR is used to convert food quantities consumed into calorie intakes. The new food basket contains 28 food items, and the new nonfood basket comprises of 24 items. Newly included items like fresh milk, coffee, readymade food, utilities, gasoline, medicines, and mobile phone charges reflect changes in food and nonfood consumption patterns in Lao PDR.

TABLE 2: NOMINAL POVERTY LINES BY YEAR OF SURVEY, 2012/13-2018/19 (LAK)

	2012/13	2018/19
National poverty line	241,699	280,910
Urban poverty line	261,361	295,518
Rural poverty line	232,061	272,312

Note: Values are shown in monthly in terms of 2019 price. The 2012/13 poverty lines are obtained by updating the new 2018/19 poverty lines backward for differences in the price levels between 2012/13 and 2018/19. See Annex 1 for more detail on the revised poverty methodology.

The new national poverty line is estimated at LAK 280,910 per month per person at 2019 prices – a 16-percent increase from LAK 241,699 per month per person in 2012/13 (Table 2). It is consistently lower for rural than for urban areas, reflecting a lower cost of living. In 2018/19, median consumption per capita was LAK 463,067 per month—67 percent higher than the

poverty line. The food poverty line is set at LAK 208,885 per month per person, comprising 75 percent of the poverty line. This reflects the high percentage of income spent by the reference poor population income on food. For the average Lao household, food constitutes approximately half of total consumption.

Organization of the report

The report consists of five chapters. Chapter 1 provides an overview of trends in poverty and inequality between 2012/13 and 2018/19. The poverty profile and the geography of poverty are presented in Chapter 2. Chapter 3 explores household consumption and the incidence of food insecurity. Chapter 4 considers non-monetary dimensions of poverty including asset ownership, living standards and access to basic services. Chapter 5 concludes the report.

In addition, Annex 1 explains the 2018/19 poverty measurement methodology in detail while addressing comparability issues between the two surveys. Annex 2 presents a sensitivity analysis for the poverty estimates including the confidence intervals of the estimates. Annex 3 provides additional tables and figures on poverty and inequality, including other measures of poverty.



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Chapter 1

Overview of poverty and inequality



Trends in poverty

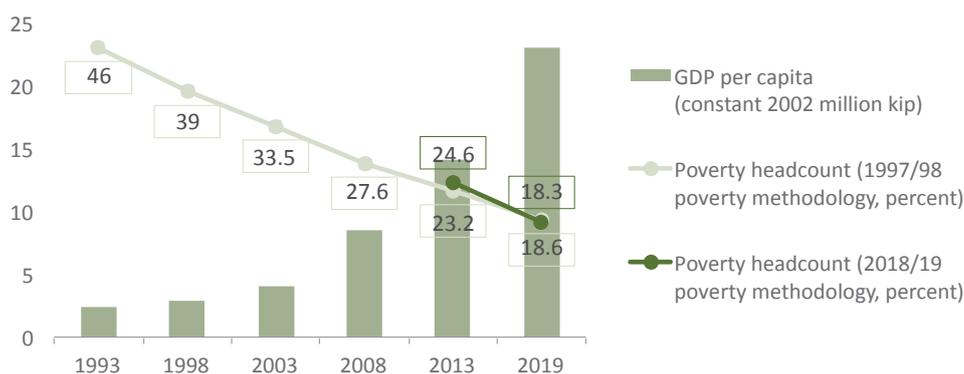
The national poverty headcount rate in 2018/19, estimated using the revised poverty methodology, was 18.3 percent. This indicates that almost a fifth of the Lao PDR population were living on less than LAK 9,364 a day (approximately USD 1.10, or 2.40 per person per day in 2011 PPP USD).

Poverty in Lao PDR continues to decline (Figure 1). The estimates based on the revised poverty methodology suggest that the incidence of poverty declined by 6.3 percentage points from 24.6 percent in 2012/13 to 18.3 percent in 2018/19. This figure is slightly larger but comparable to estimates based on the old poverty methodology. Both methodologies show that Lao PDR continues to make

progress in reducing poverty. Further discussions of changes in poverty and inequality in this report use estimates based on the new poverty methodology which reflects living conditions and spending patterns in 2018/2019.¹

Although poverty declined, the impact of growth on poverty reduction was low. Between 2012/13 and 2018/19, the annual GDP growth rate averaged about 7 percent, and GDP per capita grew at an annual rate of 5.6 percent. But a one-percent increase in GDP per capita during this period was associated with a mere 0.67 percent decline in the poverty rate. Average consumption grew by only 3.3 percent, falling behind the rate of economic growth.

FIGURE 1: TREND IN POVERTY HEADCOUNT AND GDP PER CAPITA, 1992/93-2018/19



Source: Government of Lao PDR

Poverty has fallen more rapidly in rural areas than in urban areas, but a major gap remains (Table 3). Poverty reduction in urban areas stagnated at around 7 percent between LECS 5 and LECS 6. During the same six-year period, the rural poverty rate fell by 7.6 percentage points to 23.8 percent.

The depth and severity of poverty followed a similar trend, declining markedly in rural areas while remaining largely unchanged in urban areas. Poverty depth, as measured by the poverty gap, is the extent to which individuals fall below the poverty line. The larger the poverty gap, the poorer on average people below the poverty line are, and the more resources are needed to lift

them out of poverty. Poverty severity-measured by the squared poverty gap-puts greater weight on the poorest by indicating inequality among the population living below the poverty line. In rural areas, the poverty gap declined substantially from 7.7 percent in 2012/13 to 5.1 percent in 2018/19 and the squared poverty gap fell from 2.7 to 1.7 over the same period. Both measures meanwhile remained relatively unchanged in urban areas. Notwithstanding the significant decline in rural areas, the measures of both poverty depth and severity indicate that the rural poor continued to live further from the poverty line than the urban poor. In 2018/19, the poverty gap was higher in rural areas (5.1 percent) than in urban areas (1.3 percent).

¹ See Annex 1 for more detail on poverty trend comparisons.

TABLE 3: TRENDS IN POVERTY, 2012/13-2018/19

	Poverty Headcount Rate			Poverty Gap			Squared Poverty Gap		
	2013	2019	Change	2013	2019	Change	2013	2019	Change
Urban	7.9	7.0	-0.9	1.5	1.3	-0.2	0.4	0.4	0.0
Rural	31.4	23.8	-7.6	7.7	5.1	-2.6	2.7	1.7	-1.1
Lao PDR	24.6	18.3	-6.3	5.9	3.9	-2.0	2.1	1.3	-0.8

Source: Authors' calculations from LECS 5 and LECS 6.

TABLE 4: PER CAPITA CONSUMPTION BY RURAL-URBAN, 2018/19

Measure of average consumption	Monthly consumption per capita: 2018/19			Annualized growth in real per capita consumption: 2012/13-2018/19		
	Lao PDR	Urban	Rural	Lao PDR	Urban	Rural
Median	469,184	681,460	407,651	2.4	2.1	2.3
Mean	643,147	900,772	518,879	3.3	2.6	3.1

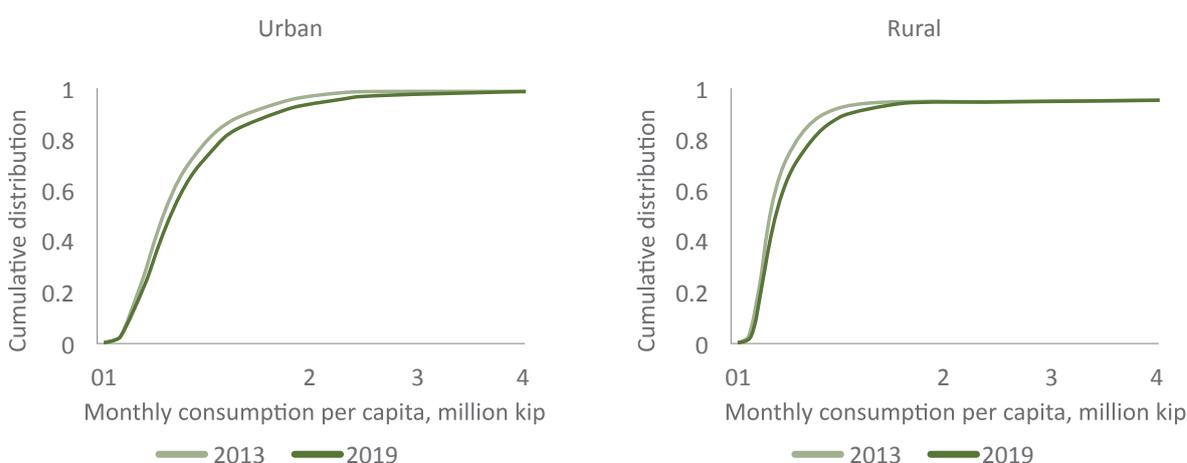
Source: Authors' calculations from LECS 5 and LECS 6.

Note: Consumption is spatially and intra-temporally deflated to adjust for spatial differences in the cost of living and differences in price levels across survey months.

Urban consumption remained far higher than in rural areas. Mean consumption per capita of rural households in real terms grew by 3.1 percent per year between 2012/13 and 2018/19, compared to 2.6 percent of urban households (Table 4). The poverty dominance curves show a noticeable shift in the welfare distribution

in both cities and the countryside (Figure 2). Nevertheless, consumption in rural areas remains lower than in urban areas. Mean consumption in urban areas, at LAK 900,772 per capita per month, was almost double that of rural areas, after adjusting for the lower rural cost of living.

FIGURE 2: POVERTY DOMINANCE CURVES



Source: Authors' calculations from LECS 5 and LECS 6.

TABLE 5: REGIONAL TRENDS IN POVERTY, 2012/13-2018/19

	Poverty Headcount Rate			Poverty gap			Squared Poverty Gap		
	2013	2019	Change	2013	2019	Change	2013	2019	Change
Lao PDR	24.6	18.3	-6.3	5.9	3.9	-2.0	2.1	1.3	-0.8
Vientiane Capital	2.5	5.0	2.5	0.3	1.0	0.7	0.1	0.3	0.3
North	31.0	20.7	-10.3	7.5	4.1	-3.4	2.6	1.2	-1.4
Central	23.5	21.5	-2.0	5.1	4.9	-0.3	1.7	1.7	0.0
South	29.9	17.7	-12.2	8.2	3.8	-4.5	3.1	1.2	-1.9
Urban									
Vientiane Capital	1.8	4.4	2.6	0.2	0.9	0.7	0.0	0.3	0.3
North	9.9	4.6	-5.3	1.6	0.9	-0.7	0.4	0.2	-0.2
Central	11.5	10.6	-0.9	2.4	2.2	-0.2	0.8	0.7	-0.1
South	11.4	10.4	-1.0	2.1	1.6	-0.5	0.6	0.5	-0.1
Rural									
Vientiane Capital	5.3	7.3	2.0	0.6	1.6	1.0	0.1	0.4	0.2
North	36.1	27.0	-9.2	8.9	5.4	-3.5	3.1	1.6	-1.5
Central	27.6	25.0	-2.6	6.1	5.8	-0.3	2.0	2.0	0.0
South	34.1	19.9	-14.2	9.6	4.4	-5.2	3.6	1.4	-2.2

Source: Authors' calculations from LECS 5 and LECS 6.

Poorer regions, especially in the north, started to catch up with richer ones. Provinces in northern Lao PDR, historically the most poverty-stricken region, drove the remarkable progress in reducing poverty. Between 2012/13 and 2018/19, poverty rates decreased in all northern provinces except in Xayabury. Bokeo, where poverty incidence more than halved from 51.8 percent to 19.4 percent, experienced the largest reduction in absolute terms due to its high incidence of poverty in 2012/13 (Table 6). This was followed by Huaphanh, where poverty fell from 45.4 percent to 26.6 percent. Phongsaly's poverty rate also plummeted to 8.1 percent. Overall, the poverty headcount rate of the northern region fell substantially from 31 percent to 20.7 percent, with an impressive gain

in urban areas where the poverty rate halved from 9.9 percent to 4.6 percent (Table 5).

Poverty also declined in all southern provinces, except in Attapeu province, where the poverty rate more than doubled after severe flooding caused by the collapse of the Xe Pian-Xe Namnoy dam in 2018. Overall, the south experienced a 12-percentage point decline in poverty from 29.9 percent in 2012/13 to 17.7 percent in 2018/19, becoming the region with the lowest incidence of poverty. The decline was mainly driven by poverty reduction in rural areas, where poverty fell from 34.1 percent to 19.9 percent. The incidence of poverty, however, remained relatively unchanged in the urban areas of southern provinces.

TABLE 6: TRENDS IN POVERTY BY PROVINCE, 2012/13-2018/19

	Poverty Headcount Rate			Poverty Gap			Squared Poverty Gap		
	2013	2019	Change	2013	2019	Change	2013	2019	Change
Lao PDR	24.6	18.3	-6.3	5.9	3.9	-2.0	2.1	1.3	-0.8
Vientiane Capital	2.5	5.0	2.5	0.3	1.0	0.7	0.1	0.3	0.3
North									
Phongsaly	19.9	8.1	-11.8	3.4	1.2	-2.2	0.9	0.3	-0.6
Luangnamtha	25.0	10.5	-14.4	4.5	1.9	-2.6	1.2	0.6	-0.6
Oudomxay	36.6	29.2	-7.5	8.9	6.4	-2.5	2.9	2.0	-1.0
Bokeo	51.8	19.4	-32.4	15.0	4.2	-10.8	5.9	1.3	-4.5
Luangprabang	30.0	20.4	-9.6	6.8	3.1	-3.7	2.1	0.7	-1.4
Huaphanh	45.4	26.6	-18.8	13.3	5.8	-7.5	5.3	1.8	-3.5
Xayabury	15.7	21.1	5.4	2.7	4.5	1.8	0.7	1.5	0.8
Central									
Xiengkhuang	34.3	26.0	-8.2	8.6	6.2	-2.3	3.1	2.2	-0.9
Vientiane	10.9	5.3	-5.6	1.6	1.0	-0.6	0.3	0.3	-0.1
Borikhamxay	14.7	20.6	5.9	2.9	5.1	2.2	0.9	1.8	0.9
Khammuane	25.2	25.5	0.3	6.6	5.1	-1.5	2.3	1.5	-0.8
Savannakhet	29.1	27.5	-1.5	6.2	6.5	0.3	2.0	2.3	0.3
Xaysomboun		8.2			1.3			0.3	
South									
Saravane	52.1	24.9	-27.2	16.8	5.6	-11.2	6.8	1.9	-4.9
Sekong	44.4	30.6	-13.8	13.3	6.2	-7.1	5.7	1.9	-3.8
Champasack	19.6	8.7	-10.9	4.0	1.8	-2.3	1.2	0.5	-0.7
Attapeu	9.1	27.8	18.8	1.4	5.7	4.4	0.3	2.0	1.7

Source: Authors' calculations from LECS 5 and LECS 6.

Note: Xaysomboun was formally established as a province in December 2013. Indicators for 2012/13 are not applicable for Xaysomboun throughout the report.

Poverty reduction stagnated in central Lao PDR, where the poverty headcount rate fell slightly from 23.5 to 21.5 percent. Only Xiengkhuang and Vientiane province experienced a noticeable decline in the poverty headcount

rate. The incidence of poverty instead increased by 5.9 percentage points in Borikhamxay, while it largely remained static in Khammuane and Savannakhet. Poverty increased in Vientiane Capital, from 2.5 percent to 5.0 percent.

The distributional pattern of consumption growth

The amount consumed by the richest grew more than among the poor, both in urban and rural areas. Consumption growth for the bottom 40 percent has been significantly lower than the mean over the past decade (Figure 3). Between 2012/13 and 2018/19, the average consumption per capita of the bottom 40 percent grew by 2.1

percent per year, compared with the national average of 3.3 percent, while for the richest quintile, the average consumption grew by 4.1 percent per year (Table 7). Thus, welfare gains were substantially lower for the poor, and poverty remained less elastic than it would have been had consumption growth been more equal.

FIGURE 3: DISTRIBUTIONAL PATTERNS OF GROWTH (GROWTH INCIDENCE CURVES), 2012/13-2018/19

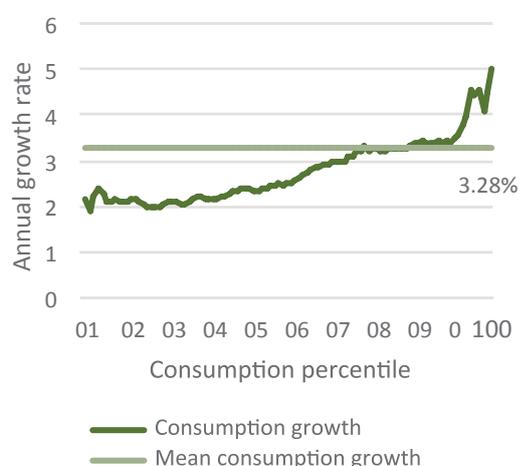
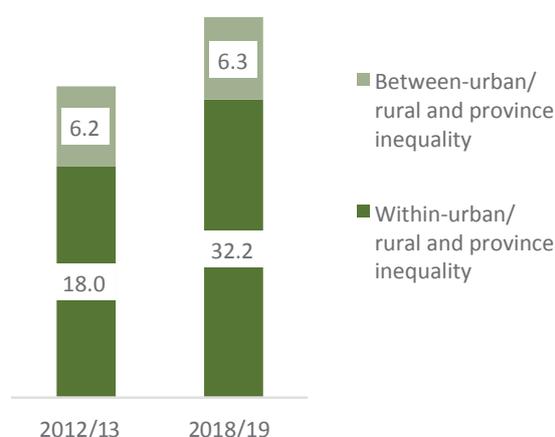


FIGURE 4: THEIL INDEX ABSOLUTE DECOMPOSITION OF INEQUALITY



Source: Authors' calculations from LECS 5 and LECS 6.

As such, inequality continued to rise, driven by an increasing concentration of consumption at the top end of the distribution. The Gini index, a measure of inequality, increased from 36 in 2012/13 to 38.8 in 2018/19. In 2018/19, the richest quintile consumed 7 times more on average per capita than the poorest quintile, rising to 9 times more for the richest 10 percent. Other inequality measures also increased (Table 8), with the Theil index (GE(1)) rising from 24.2 to 29.5. All the indicators show that inequality remains higher in urban than in rural areas.

Rising inequality was driven by a widening consumption gap within areas. The Theil index allows for overall inequality to be broken down into inequality within areas and inequality between areas. In 2012/13, a quarter of inequality in Lao PDR was due to differences between urban and rural areas and provinces. This declined in 2018/19 – to a fifth of overall inequality – as disparities within areas increased, driving the rise in overall inequality (Figure 4).

TABLE 7: AVERAGE CONSUMPTION BY CONSUMPTION QUINTILE, 2018/19

Quintile	Average nominal monthly consumption per capita (KIP): 2018/19			Annualized growth in real per capita consumption (%): 2012/13–2018/19		
	Lao PDR	Urban	Rural	Lao PDR	Urban	Rural
1	226,386	234,461	225,178	2.1	2.0	2.0
2	346,444	349,503	345,756	2.1	2.1	2.1
3	474,048	478,472	472,178	2.5	2.5	2.4
4	675,500	685,247	668,575	3.1	3.1	3.0
5	1,492,505	1,571,527	1,373,827	4.1	4.0	4.3

Source: Authors' calculations from LECS 5 and LECS 6.

TABLE 8: TRENDS IN INEQUALITY, 2012/13-2018/19

	Gini		GE(0)		GE(1)		GE(2)	
	2013	2019	2013	2019	2013	2019	2013	2019
Lao PDR	36.0	38.8	21.1	24.7	24.2	29.5	38.5	56.1
Urban	35.2	38.6	20.2	24.7	22.5	29.1	34.1	55.2
Rural	31.5	34.5	16.3	19.5	18.6	23.2	28.3	38.7

Source: Authors' calculations from LECS 5 and LECS 6.

TABLE 9: GROWTH AND REDISTRIBUTION DECOMPOSITION OF POVERTY, 2012/13-2018/19

	2013	2019	Actual change	Growth	Redistribution
Lao PDR	24.6	18.3	-6.3	-10.5	4.2
Urban	7.9	7.0	-0.9	-4.0	3.1
Rural	31.4	23.8	-7.6	-12.5	4.9

Source: Authors' calculations from LECS 5 and LECS 6.

Note: Datt-Ravallion decomposition showing how much of the change in poverty can be attributed to changes in consumption growth and how much to the distribution of the gains from growth.

Poverty would have declined by a further 4.2 percentage points if inequality had not risen. Generally, consumption growth would be associated with poverty reduction while growth in inequality would tend to increase poverty. This means that rising inequality dampens the effect of growth on poverty reduction. The decomposition shows that poverty would have fallen by 10.5 percentage points in total between 2012/13 and 2018/19 if inequality had not risen (Table 9). Rising inequality almost entirely counteracts the poverty reduction impact of economic growth in urban areas.

In sum, two factors slowed the pace of poverty reduction compared to rapid GDP growth in Lao PDR during this period. First, consumption growth was more favorable to the non-poor. Secondly, household consumption growth was lower than GDP growth. Because poverty reduction is directly linked to consumption growth rather than GDP growth, the relationship between the rate of poverty reduction and GDP growth is partly determined by the extent to which higher GDP growth is translated into household consumption growth. Mean per

capita household consumption growth, measured using the LECS survey, was 3.3 percent per annum over the 2012/13 to 2018/19 period, which was 2.3 percentage points below the average rate of per capita GDP growth of 5.6 percent.

One possible reason for this divergence is that household surveys largely fail to capture extremely wealthy households who have a high non-response rate. Accounting differences between the national accounts and the survey-based consumption aggregate is another reason. The consumption aggregate used for measuring poverty reflects amortized spending on housing and durable assets, but the full purchase value is recorded in national accounts. This could result in survey-based consumption growth being underestimated if expenditures on durable goods are rapidly increasing. Lastly, GDP itself could have been incorrectly measured in national accounts. Interpretation of the poverty-growth gap highlighted in this report should take into consideration these possible discrepancies.

Regional comparison

Consumption levels of Lao households are lower than their counterparts in other countries in the Southeast Asia region, apart from Myanmar and Cambodia. Nearly 9 percent of the population in Lao PDR live on less than USD 1.9 per day in 2011 PPP terms, compared to 6 percent in the Philippines and 5 percent in Indonesia (Table 10). Slightly more than a third of the population consume less than USD 3.2 a day per capita in 2011 PPP terms (which is the lower-middle-in-

come international poverty line), compared to a quarter of the Philippine and Indonesian populations. Lao PDR experienced a slower poverty reduction from its economic growth than its neighbors. If the impact of economic growth on poverty reduction in Lao PDR had been similar to Indonesia, the country would have almost eliminated extreme poverty (USD 1.9 per day in 2011 PPP terms) in 2018/19.

TABLE 10: REGIONAL COMPARISON OF POVERTY RATE AND INEQUALITY

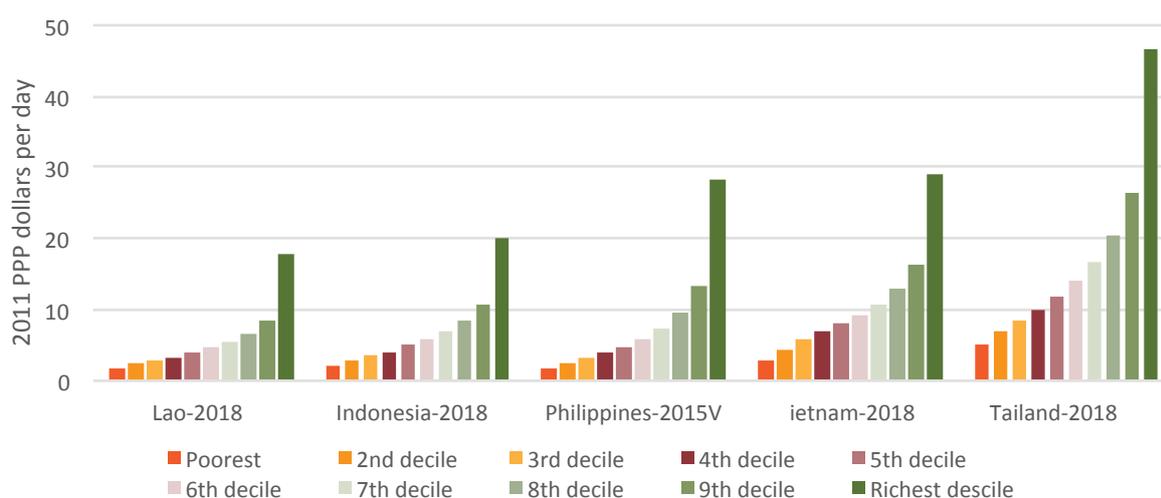
Country	Poverty rate (PPP2011 \$1.90-a-day)			Poverty rate (PPP2011 \$3.20-a-day)			Gini Coefficient
	Most recent survey	Change	Growth elasticity of poverty	Most recent survey	Change	Growth elasticity of poverty	
Lao PDR (2013-19)	8.6	7.0	1.17	35.2	13.2	0.71	38.8
Vietnam (2012-18)	1.9	0.9	0.87	7.0	6.4	1.33	35.7
Indonesia (2012-18)	4.6	7.0	2.38	24.2	19.4	1.76	37.7
Philippines (2012-15)	6.1	4.4	2.81	26.0	7.5	1.52	44.4

Source: Authors' calculations.

Note: Change shows a percentage point reduction in the poverty rate between the two most recent surveys. Gini coefficient is from the most recent survey.

- International poverty estimates in this report are based on the original 2011 PPPs. Application of the revised 2011 PPPs, which were published in May 2020, may slightly affect these estimates.

FIGURE 5: REGIONAL COMPARISON OF MEAN CONSUMPTION BY DECILE



Source: Authors' calculations.

As in other countries in the region, the richest consume the most. Average consumption among the richest 10 percent in Lao PDR is USD 17.80 a day in 2011 PPP terms, which is 10 times

greater than among the poorest 10 percent (Figure 5). The difference is comparable to Indonesia, Vietnam, and Thailand. Inequality, however, is rising in Lao PDR.

Summary

Poverty continues to decline in Lao PDR. Both northern and southern provinces are experiencing a rapid reduction in poverty. However, poverty reduction has stagnated in central Lao PDR, historically the wealthiest region. The rural-urban gap and disparities across provinces have narrowed. Yet, with

widening consumption gaps within regions, inequality has risen. Consumption grew at a faster pace among the better off. Per capita consumption growth was significantly lower than GDP growth. These two factors combined contributed to a slower pace of poverty reduction relative to growth.



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Chapter 2: Patterns of poverty



Geographical pattern of poverty

Rural poverty is more than three times higher than in urban areas. Despite accounting for 67 percent of the population, rural areas are home to nearly 90 percent of the poor population. Nevertheless, the urban share of the poor has increased in recent years, reflecting two factors. Between 2012/13 and 2018/19, poverty

declined faster in rural areas. At the same time, more people moved into cities. The proportion of the poor living in urban areas rose from 9.2 percent to 12.4 percent between 2012/13 and 2018/19, while the urban share of the population as a whole also rose from 28.8 percent to 32.5 percent (Table 11).

TABLE 11: POVERTY HEADCOUNT RATE AND DISTRIBUTION OF THE POOR BY GEOGRAPHIC REGIONS, 2012/13–2018/19

	Poverty Headcount Rate			Distribution of the Poor			Distribution of Population		
	2013	2019	Change	2013	2019	Change	2013	2019	Change
Lao PDR	24.6	18.3	-6.3	100.0	100.0	0.0	100.0	100.0	0.0
Urban	7.9	7.0	-0.9	9.2	12.4	3.2	28.8	32.5	3.7
Rural	31.4	23.8	-7.6	90.8	87.6	-3.2	71.2	67.5	-3.7
Region									
Vientiane Capital	2.5	5.0	2.5	1.2	3.6	2.4	12.0	13.2	1.2
North	31.0	20.7	-10.3	38.6	35.5	-3.1	30.6	31.4	0.7
Central	23.5	21.5	-2.0	34.0	41.9	7.8	35.8	35.7	0.0
South	29.9	17.7	-12.2	26.2	19.0	-7.2	21.6	19.7	-1.9
Urban									
Vientiane Capital	1.8	4.4	2.6	0.7	2.5	1.8	9.7	10.5	0.8
North	9.9	4.6	-5.3	2.4	2.2	-0.2	6.0	8.8	2.8
Central	11.5	10.6	-0.9	4.3	5.1	0.8	9.2	8.8	-0.4
South	11.4	10.4	-1.0	1.8	2.5	0.7	4.0	4.5	0.5
Rural									
Vientiane Capital	5.3	7.3	2.0	0.5	1.1	0.6	2.4	2.7	0.4
North	36.1	27.0	-9.2	36.2	33.3	-2.9	24.6	22.6	-2.0
Central	27.6	25.0	-2.6	29.7	36.8	7.0	26.6	26.9	0.3
South	34.1	19.9	-14.2	24.4	16.5	-7.9	17.6	15.2	-2.4

Source: Authors' calculations from LECS 5 and LECS 6.

Despite maintaining its share of the total population at 36 percent, the central region in 2018/19 was host to 41.9 percent of the poor, a considerable increase from 34 percent six years previously. Moreover, contrary to national trends, the rural share of the poor significantly increased in central Lao PDR. In 2018/19, rural areas of the central region became home to 37 percent of the poor, compared to 30 percent in 2012/13. Following the national decline in poverty, the northern and southern regions accounted for 35.5 percent and 19.0 percent of the poor, a robust decline from 38.6 percent and 26.2 percent in 2012/13 respectively. The remarkable decline in the poverty headcount in northern Lao PDR was driven by urban poverty

reduction. Although the urban population share rose from 6 percent in 2012/13 to 9 percent in 2018/19, the proportion of the poor found in urban areas of the northern region remained at around 2 percent. In contrast, the decline in the southern region was driven by rural areas. In 2018/19, rural areas of the southern region accounted for 16.5 percent of the poor, a substantial decline from 24.4 percent in 2012/13. The proportion of the poor found in urban areas rose in the southern region and Vientiane Capital but for different reasons. The former was due to more rapid poverty reduction in rural areas, while the latter was due to an increase in urban poverty.

TABLE 12: POVERTY AND DISTRIBUTION OF THE POOR BY PROVINCE, 2012/13–2018/19

	Poverty Headcount Rate			Distribution of the Poor			Distribution of Population		
	2013	2019	Change	2013	2019	Change	2013	2019	Change
Lao PDR	24.6	18.3	-6.3	100.0	100.0	0.0	100.0	100.0	0.0
Vientiane Capital	2.5	5.0	2.5	1.2	3.6	2.4	12.0	13.2	1.2
North									
Phongsaly	19.9	8.1	-11.8	2.4	1.2	-1.1	2.9	2.8	-0.2
Luangnamtha	25.0	10.5	-14.4	3.0	1.8	-1.2	3.0	3.0	0.1
Oudomxay	36.6	29.2	-7.5	6.5	8.7	2.2	4.4	5.5	1.1
Bokeo	51.8	19.4	-32.4	5.8	3.2	-2.6	2.7	3.0	0.3
Luangprabang	30.0	20.4	-9.6	8.7	7.8	-0.9	7.1	7.0	-0.2
Huaphanh	45.4	26.6	-18.8	8.5	6.0	-2.5	4.6	4.1	-0.5
Xayabury	15.7	21.1	5.4	3.8	6.9	3.1	5.9	6.0	0.1
Central									
Xiengkhuang	34.3	26.0	-8.2	6.1	5.7	-0.4	4.4	4.0	-0.4
Vientiane	10.9	5.3	-5.6	3.6	1.8	-1.8	8.2	6.3	-1.9
Borikhamxay	14.7	20.6	5.9	2.3	4.8	2.5	3.8	4.2	0.4
Khammuane	25.2	25.5	0.3	5.1	8.3	3.2	5.0	6.0	1.0
Savannakhet	29.1	27.5	-1.5	16.9	20.6	3.7	14.3	13.7	-0.6
Xaysomboun		8.2			0.6			1.4	
South									
Sekong	44.4	30.6	-13.8	4.2	3.2	-0.9	2.3	1.9	-0.4
Champasack	19.6	8.7	-10.9	8.8	4.7	-4.1	11.0	9.8	-1.2
Attapeu	9.1	27.8	18.8	0.9	3.1	2.2	2.4	2.0	-0.4
Saravane	52.1	24.9	-27.2	12.4	8.0	-4.3	5.9	5.9	0.1

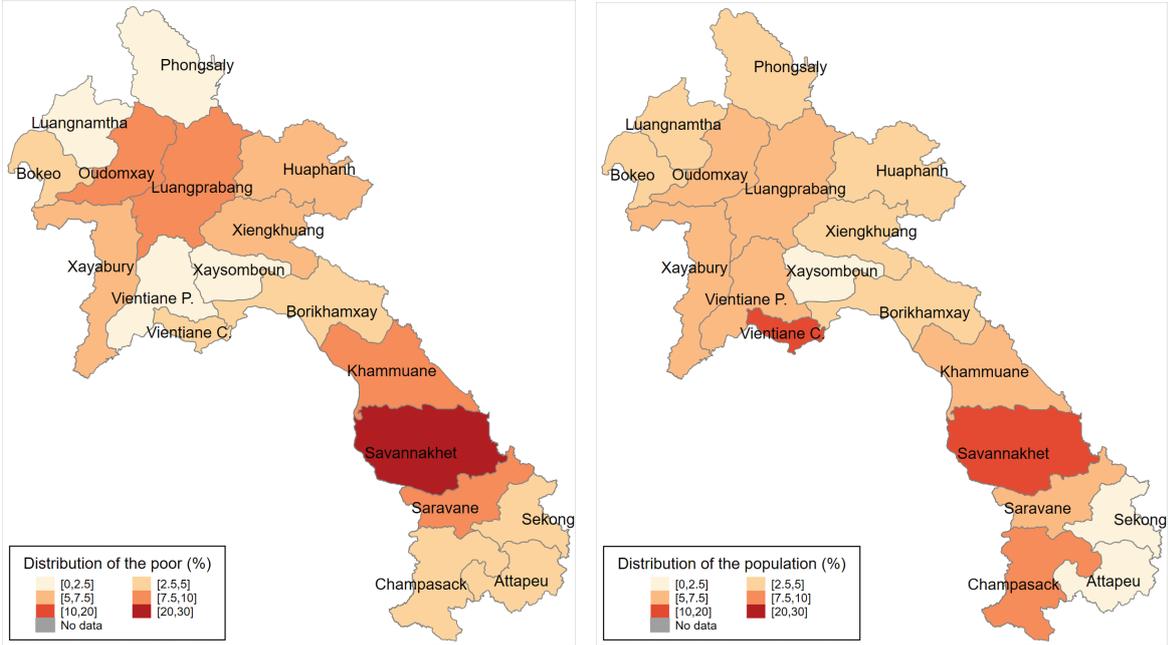
Source: Authors' calculations from LECS 5 and LECS 6.

Savannakhet alone accounts for 20.6 percent of the country’s poor, reflecting its large population and high poverty rates (Table 12, Figure 6, Figure 7). Other provinces with a large share of the poor are Oudomxay (8.7 percent), Khammuane (8.3 percent), Saravane (8.0 percent) and Luangprabang (7.7 percent). Although Sekong has the highest provincial

poverty rate, of 30.6 percent, the province accounts for just 3 percent of the poor because of its small population. Conversely, highly populated provinces with a low poverty incidence such as Vientiane Capital and Champasack together make up 8 percent of the poor given that they constitute 23 percent of the population.

FIGURE 6: DISTRIBUTION OF THE POOR, 2018/19

FIGURE 7: DISTRIBUTION OF THE POPULATION, 2018/19



Source: Authors’ calculations from LECS 6.



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TABLE 13: POVERTY HEADCOUNT RATE AND DISTRIBUTION OF THE POOR BY DISTRICT PRIORITY, 2012/13–2018/19

	Poverty Headcount Rate			Distribution of the Poor			Distribution of Population		
	2013	2019	Change	2013	2019	Change	2013	2019	Change
Lao PDR	24.6	18.3	-6.3	100	100	0	100	100	0
Priority	41.5	32.8	-8.7	14.2	13.8	-0.4	8.4	7.7	-0.7
Non-priority	23.1	17.1	-6.0	85.8	86.2	0.4	91.6	92.3	0.7

Source: Authors' calculations from LECS 5 and LECS 6.

Poverty remains high in poor districts identified as priority areas for implementing the national poverty reduction program.² In 2012/13, the poverty rate in such areas was 41.5 percent which was 18.4 percentage points higher than that of non-priority districts. Between 2012/13 and 2018/19, the poverty headcount rate in priority districts declined by 8.7 percentage points, slightly larger than 6.0 percentage points in non-priority districts (Table 13). But the gap between priority districts and non-priority districts remains large, at 15.7 percentage points.

Lao PDR shares its eastern border with Vietnam, extending from Phongsaly in the northern region to Sekong in the southern region. Inland districts (i.e., those without international borders) and those bordering Vietnam together made up nearly 80 percent of the poor, despite constituting 64 percent of the population. The poverty headcount rate remains highest in locations bordering Vietnam, at 31.9 percent. Districts bordering Vietnam in particular accounted for 20 percent of the poor, while making up 11 percent of the population. The poor population were concentrated in

three provinces bordering central Vietnam: Savannakhet, Khammuane, and Saravane. The distribution of the poor by proximity to the borders of different neighboring countries remained relatively unchanged between 2012/13 and 2018/19. However, districts without international borders constituted a larger fraction of the population in 2018/19 (52.9%) than in 2012/13 (48.7%), with 58 percent of the poor now residing in these districts.

Poverty declined faster along the China-Myanmar and Cambodia borders. The poverty rate along the China-Myanmar border fell from 21.8 percent in 2012/13 to 13.8 percent in 2018/19, almost catching up with the poverty rate in the historically wealthier districts bordering Thailand (Table 14). The fall was driven by poverty reduction in Bokeo, Luangnamtha, and Phongsaly. In contrast, poverty fell the slowest in areas bordering Thailand owing to rising poverty in Vientiane Capital, Xayabury, Borikhamxay, and Khammuane. Along the Cambodia border, the incidence of poverty fell by as much as 15.5 percentage points to the same level of internal districts (20 percent).

² The government identified 23 priority districts under the national poverty reduction program (2016-2020).

TABLE 14: POVERTY HEADCOUNT RATE AND DISTRIBUTION OF THE POOR BY BORDER PROXIMITY, 2012/13–2018/19

	Poverty Headcount Rate			Distribution of the Poor			Distribution of Population		
	2013	2019	Change	2013	2019	Change	2013	2019	Change
Lao PDR	24.6	18.3	-6.3	100.0	100.0	0.0	100.0	100.0	0.0
Inland	27.5	20.1	-7.4	54.4	58.0	3.6	48.7	52.9	4.1
Thailand	12.8	10.3	-2.5	17.0	16.7	-0.3	32.8	29.7	-3.1
China/Myanmar	21.8	13.8	-8.0	2.9	2.5	-0.4	3.2	3.3	0.1
Vietnam	43.5	31.9	-11.6	20.3	19.8	-0.5	11.5	11.3	-0.1
Cambodia	35.8	20.3	-15.5	5.4	3.0	-2.4	3.7	2.7	-1.0

Source: Authors' calculations from LECS 5 and LECS 6.



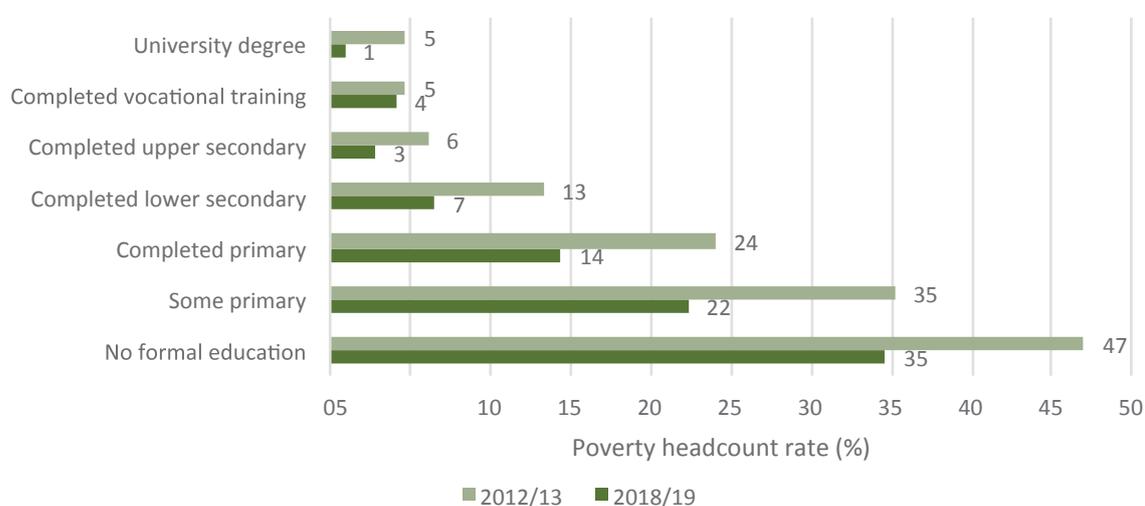
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Characteristics of the poor

Poverty remains high among the poorly educated. Nearly 35% of those living in households headed by someone with no formal education are poor. This rate is just 3% in households headed by those with at least a completed upper secondary education (Figure 8). Among residents of households whose head is primary educated, the poverty rate declines to 14.4 percent, further dropping to 6.5

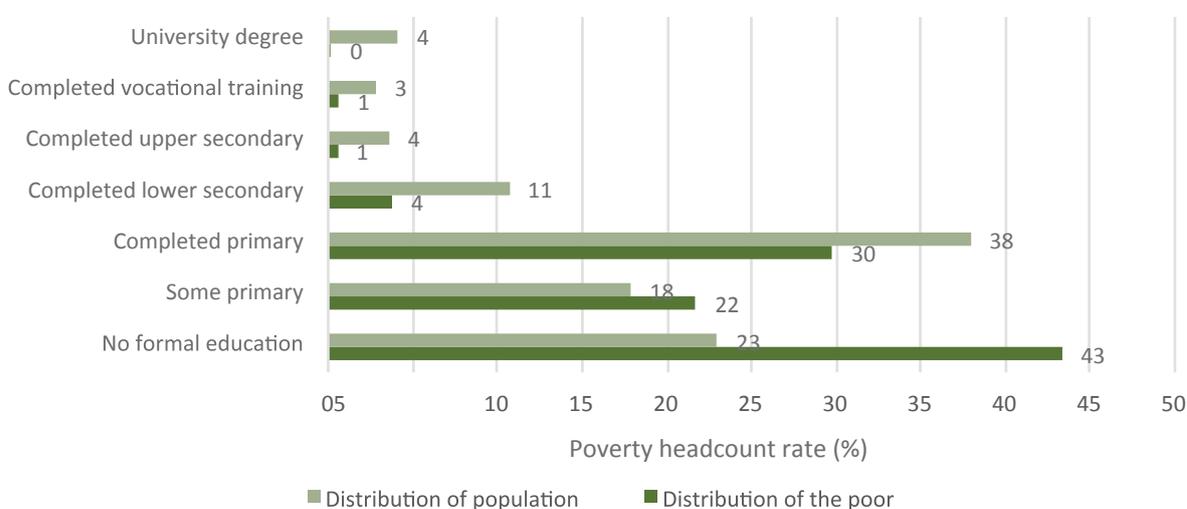
percent when a household head has completed lower secondary education. There is almost no poverty among households headed by a tertiary-educated person. People living in households headed by a person who did not finish primary education constitute 65 percent of the poor, despite making up only 40 percent of the population (Figure 9).

FIGURE 8: POVERTY HEADCOUNT RATE BY HOUSEHOLD HEAD'S HIGHEST LEVEL OF COMPLETED EDUCATION, 2012/13–2018/19



Source: Authors' calculations from LECS 5 and LECS 6.

FIGURE 9: DISTRIBUTION OF THE POOR BY HOUSEHOLD HEAD'S HIGHEST LEVEL OF COMPLETED EDUCATION, 2018/19



Source: Authors' calculations from LECS 5 and LECS 6.

Poverty fell fastest among households headed by a person with at least lower secondary education. Between 2012/13 and 2018/19, poverty declined by more than half among people whose household head had secondary or tertiary education, except for vocational training. The pace of poverty reduction was slower for household heads with primary education or less. Poverty declined slightly among households headed by a person with vocational training, from 5 to 4 percent. Nevertheless, these three groups—those living in households headed by a person with upper secondary education, vocational training and university education—together constituted only two percent of the poor in 2018/19.

Poverty is concentrated among minority ethnic groups. The Lao-Tai ethnic group makes up 65 percent of the population. The three

largest ethnic minorities include the Mon-Khmer, the Hmong-lumien, and the Chine-Tibet, which constitute 21.7 percent, 9.3 percent and 3.1 percent of the population, respectively (Table 15). Between 2012/13 and 2018/19, the poverty rate of the Lao-Tai, Mon-Khmer, and Chine-Tibet declined by almost one-third. Poverty only decreased by 15 percent among the Hmong-lumien. As a result, poverty remains lowest among the Lao-Tai ethnic group at 10.6 percent, followed by the Chine-Tibet (18.1 percent) and the Mon-Khmer (32.7 percent). The incidence of poverty has become the highest among Hmong-lumien, at 38.4 percent. They constitute 19 percent of the poor, despite making up less than 10 percent of the population. The Lao-Tai and the Mon-Khmer ethnic groups each constitute around 38 percent of the poor population.

TABLE 15: POVERTY HEADCOUNT RATE BY ETHNICITY OF HOUSEHOLD HEAD, 2012/13–2018/19

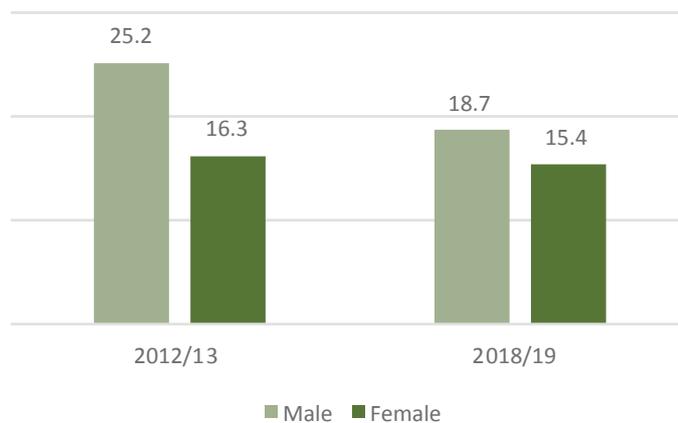
	Poverty Headcount Rate			Distribution of the Poor			Distribution of Population		
	2013	2019	Change	2013	2019	Change	2013	2019	Change
Lao PDR	24.6	18.3	-6.3	100.0	100.0	0.0	100.0	100.0	0.0
Lao-Tai	14.5	10.6	-4.0	39.4	37.7	-1.7	66.7	65.2	-1.5
Mon-Khmer	48.1	32.7	-15.4	43.1	38.7	-4.4	22.1	21.7	-0.4
Chine-Tibet	25.7	18.1	-7.5	3.5	3.0	-0.5	3.4	3.1	-0.3
Hmong-lumien	45.2	38.4	-6.8	13.0	19.5	6.5	7.1	9.3	2.2
Other	33.5	26.6	-6.9	1.0	1.0	0.0	0.7	0.7	-0.1

Source: Authors’ calculations from LECS 5 and LECS 6.

Ethnic minorities have lower educational attainment than the Lao-Tai majority. Less than one-third of the Lao-Tai population has less than primary education, compared to more than half the ethnic minority population (See Annex 3). Only a third of the Chine-Tibet in particular have at least completed primary education. The difference in poverty rates between the Lao-Tai and the Chine-Tibet can be explained by the education gap: Lao-Tai and Chine-Tibet individuals with the same level of education are equally likely to be poor. Poverty rates among the other two ethnic minority groups, however, are always higher than that of the Lao-Tai even when education is factored in.

Poverty is generally lower among female-headed households. In 2012/13, their poverty rate was 16.3 percent, compared to 25.2 percent among male-headed households (Figure 10). This gap has become narrower; after a 6.5 percentage -point decline in poverty among male-headed households between 2012/13 and 2018/19, compared to a mere 0.9-percentage point decline in poverty among their female-headed counterparts. Nevertheless, the persistent poverty gap reflects the fact that male-headed households tend to be larger (5.6 persons per household on average) and engaged in farming (60 percent), while female-headed households are more likely to be smaller (4.9) and work in the services sector, with just 45 percent of female household heads engaged in farming.

FIGURE 10: POVERTY HEADCOUNT RATE BY GENDER OF HOUSEHOLD HEAD, 2012/13–2018/19



Source: Authors' calculations from LECS 5 and LECS 6.



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Household economic activities

Households headed by an agricultural self-employed person and an unemployed or economically inactive person have the highest poverty rates. The poverty rate among people living in households headed by an unemployed or economically inactive person is 21.3 percent.³ About 90 percent of unemployed household heads were previously engaged in agricultural activities but have become unemployed due to seasonality, while economically inactive persons are mostly the elderly. Poverty remains stubbornly high among households headed by an agricultural self-employed person, at 24.6 percent in 2018/19, despite falling by 7.3 percentage points over the previous six years. These households together with households headed by a seasonally unemployed person

constitute 75 percent of the poor. Conversely, the poverty rate of households headed by wage workers and nonfarm self-employed workers is low, with each estimated to be around 5 percent in 2018/19, a marked decline from 9 percent in 2012/13.

Remittances from migrants have become an important source of income. In 2018/19, 14 percent of the population lived in households that received remittances, up from 11 percent in 2012/13. The poverty rate among remittance-receiving households has fallen from 13.8 percent in 2012/13 to 10.2 percent in 2018/19: almost half the poverty rate than those without remittances.

TABLE 16: POVERTY HEADCOUNT RATE BY MAIN EMPLOYMENT STATUS OF THE HOUSEHOLD HEAD, 2012/13–2018/19

Main employment status in past 7 days	2013	2019	Change
Lao PDR	24.6	18.3	-6.3
Paid worker	9.2	4.5	-4.7
Nonfarm self-employed	9.2	5.5	-3.6
Farm self-employed	31.9	24.6	-7.3
Unemployed and economically inactive	27.8	21.3	-6.5

Source: Authors' calculations from LECS 5 and LECS 6.

TABLE 17: POVERTY HEADCOUNT RATE BY MAIN EMPLOYMENT STATUS OF THE HOUSEHOLD HEAD, 2012/13–2018/19

Remittance receipt status	2013	2019	Change
Lao PDR	24.6	18.3	-6.3
No remittances	26.0	19.6	-6.4
Received remittances	13.8	10.2	-3.6

Source: Authors' calculations from LECS 5 and LECS 6.

³ The unemployed comprise all persons of working age who were without work but available for and seeking work during the previous week. Those who did not seek work but had a job offer to start work or were waiting for the next busy season are also counted as unemployed.

TABLE 18: POVERTY HEADCOUNT RATE BY HOUSEHOLD LIVELIHOOD, 2012/13–2018/19

Livelihood portfolio	2013	2019	Change
Lao PDR	24.6	18.3	-6.3
Farming and/or non-labor income	38.5	26.2	-12.3
Nonfarm jobs and/or non-labor income	2.2	2.6	0.4
Farming and nonfarm jobs and/or non-labor income	15.8	10.7	-5.1
Non-labor income only	-	17.1	-

Sources: Authors’ calculations from LECS 5 and LECS 6.

Household livelihood strategies are correlated with poverty status. Those that depend mostly on farm income have the highest poverty rate. Despite impressive poverty reduction in recent years, the poverty headcount rate for people living in these households remains high at 26.2

percent (Table 18), compared to 10.7 percent for farm households that diversify into nonfarm activity—waged jobs, self-employment, or both. Poverty is lowest among those living in households that rely exclusively on nonfarm income, at an estimated 2.6 percent in 2018/19.

Summary

As poverty has fallen, its spatial distribution has also shifted significantly. Although rural areas continue to constitute a large share of the poor, the urban share of the poor has increased, and central Lao PDR has become home to a significantly larger fraction of those in poverty nationwide. Poverty has declined rapidly along the China-Myanmar and Cambodia borders, but many households in inland areas and in provinces bordering Vietnam have been left behind. Poverty has only fallen slightly and remains high in priority districts. It also remains higher among ethnic minorities (Chine-Tibet,

Hmong-lumien and Mon-Khmer) than the Lao-Tai majority. Only the Chine-Tibet ethnic group experienced a rapid decline in poverty between 2012/13 and 2018/19, thus catching up with the Lao-Tai ethnic group. The incidence of poverty is higher among households headed by the non-secondary educated, the unemployed, the Hmong-lumien persons and individuals self-employed in farming. The Hmong-lumien group has also experienced the slowest pace of poverty reduction, with gaps between them and other ethnic groups widening as a result.



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Chapter 3: Household consumption and food security

Composition of total consumption

Households spend more than half of their outgoings on food. The food consumption share is higher in rural areas (68 percent) than in urban areas (53.1 percent).⁴ In both survey years, the average share of food expenditure among rural households was 15 percentage points higher than in urban areas. Rural areas consume

more of their own food, as most households are engaged in agricultural activities. However, rural households have become more dependent on markets for food items in recent years. The share of own consumption among rural households fell from 42.8 percent in 2012/13 to 37.3 percent in 2018/19.

TABLE 19: COMPOSITION OF TOTAL CONSUMPTION BY RURAL-URBAN LOCATION, 2012/13–2018/19

Expenditure item	2012/13			2018/19		
	Lao PDR	Urban	Rural	Lao PDR	Urban	Rural
Total food consumption	60.3	49.9	64.8	62.9	53.1	68.0
Market food expenditure	25.5	36.6	20.7	32.7	39.9	28.9
Own consumption	33.5	11.9	42.8	28.4	11.4	37.3
Total non-food consumption	39.7	50.1	35.2	37.1	46.9	32.0
Clothes and footwear	1.7	2.0	1.6	1.3	1.7	1.1
Utilities and fuel	4.9	4.0	5.4	3.7	3.5	3.9
Household sundries	1.8	2.1	1.6	1.8	2.2	1.7
Medical care	1.6	1.8	1.5	1.1	1.1	1.0
Transport and communication	8.9	11.6	7.7	7.4	9.5	6.3
Education	4.5	6.0	3.8	4.7	5.6	4.2
Personal care items	0.8	1.2	0.7	0.8	1.1	0.7
Recreation and culture	1.1	1.8	0.9	1.3	2.0	0.9
Alcohol and tobacco	3.1	3.0	3.1	2.6	2.5	2.7
Housing rent	10.8	16.2	8.4	11.9	17.2	9.1
Miscellaneous	0.4	0.4	0.4	0.5	0.5	0.4

Source: Authors' calculations from LECS 5 and LECS 6.

Note: Weighted average of household expenditure shares. Education expenditure and durable goods are obtained from a 12-month recall period. Durable goods are included using the user cost approach. Rent is imputed based on the dwellings' characteristics and location. Other items are obtained from a 30-day diary for LECS5 and a 14-day diary for LECS6.

Urban households spend a significantly larger share of expenditure on rent, transport and communications, recreation and cultural activities and education. Rural households have spent slightly more on education in recent years, with

share of expenditure on schooling increasing from 3.8 percent to 4.2 percent over the six-year period. They also devoted a slightly higher share to alcohol and tobacco, and utilities and fuel (mainly firewood and charcoal).

⁴ See Annex 3 for composition of total consumption based on 30-day diary subsample of the LECS6 survey.

Poor households spent 76.8 percent of their expenditure on food in 2018/19, exactly 16 percentage points more than among non-poor households (Table 20). Poor households also relied doubly on their own food supply compared to non-poor households, with the share of own consumption at 52.7 percent versus 24.6 percent respectively. The difference

is larger among rural households. In rural areas, own food consumption accounted for 56.1 percent of total consumption expenditure among the poor, compared to 33.1 percent among the non-poor. Just 28.7 percent of the food supply of poor urban households came from their own production, and 10.5 percent among non-poor.

TABLE 20: COMPOSITION OF TOTAL CONSUMPTION BY POVERTY STATUS, 2018/19

Expenditure item	Lao PDR		Urban		Rural	
	Poor	Non-poor	Poor	Non-poor	Poor	Non-poor
Total food consumption	76.8	60.8	69.9	52.3	77.8	65.9
Market food expenditure	22.0	34.3	38.6	40.0	19.7	30.9
Own consumption	52.7	24.6	28.7	10.5	56.1	33.1
Total non-food consumption	23.2	39.2	30.1	47.7	22.2	34.1
Clothes and footwear	0.4	1.5	0.5	1.8	0.3	1.3
Utilities and fuel	3.8	3.7	2.4	3.5	4.0	3.8
Household sundries	0.6	2.0	1.0	2.2	0.6	1.9
Medical care	0.3	1.2	0.5	1.2	0.3	1.2
Transport and communication	3.3	8.0	4.5	9.7	3.1	7.0
Education	3.8	4.8	4.5	5.7	3.7	4.4
Personal care items	0.4	0.9	0.7	1.1	0.4	0.7
Recreation and culture	0.2	1.4	0.2	2.1	0.2	1.1
Alcohol and tobacco	1.4	2.8	1.0	2.5	1.4	3.0
Housing rent	8.8	12.3	14.7	17.4	8.0	9.3
Miscellaneous	0.2	0.5	0.1	0.6	0.2	0.5

Sources: Authors' calculations from LECS 6.

Note: Education expenditure and durable goods are obtained from a 12-month recall period. Durable goods are included using the user cost approach. Rent is imputed based on the dwellings' characteristics and location. Other items are obtained from a 30-day diary for LECS5 and a 14-day diary for LECS6.

Non-poor households devote a larger share of total consumption on non-food items except utilities and fuel. By contrast, a large share of spending of the rural poor goes to firewood and charcoal. Spending on housing rent, transport

and communications, recreation and cultural activities takes a larger share of total expenditure of non-poor households, especially in urban areas.

Food consumption and food security

The composition of food expenditure changed slightly between 2012/13 and 2018/19. Overall, households spent a slightly smaller share of their food costs on rice and fish and a greater share on milk, cheese and eggs, vegetables and tubers (Table 21). Urban households

devote a larger share of total food expenditure on beverages, restaurants meals and takeaways (2 percent) than rural households (2.5 percent). Conversely, shares of rice and fish in total expenditure are higher among rural households than urban households.

TABLE 21: COMPOSITION OF FOOD CONSUMPTION BY RURAL-URBAN LOCATION, 2012/13–2018/19

Expenditure item	2012/13			2018/19		
	Lao PDR	Urban	Rural	Lao PDR	Urban	Rural
Rice	33.9	22.8	38.8	30.8	25.1	33.8
Other cereals and bread	2.5	3.4	2.1	2.6	3.2	2.3
Meat	22.7	23.8	22.2	23.2	22.8	23.4
Fish	14.7	12.5	15.7	12.7	11.1	13.6
Milk, cheese and eggs	1.8	2.8	1.3	2.8	3.9	2.3
Oils	0.3	0.4	0.2	0.4	0.4	0.4
Fruits	2.0	3.6	1.3	2.5	3.4	2.1
Vegetables and tubers	10.8	10.0	11.1	12.0	10.0	13.1
Sugar and sweets	0.8	1.3	0.6	0.8	1.0	0.7
Beverages	2.4	4.2	1.6	3.0	4.3	2.3
Other food	2.1	1.8	2.2	3.3	3.0	3.5
Meals in restaurants	6.0	13.4	2.8	5.7	12.0	2.5

Source: Authors' calculations from LECS 5 and LECS 6.

Note: LECS5 consumption is based on a 30-day diary. LECS6 consumption is based on a 14-day diary.

TABLE 22: COMPOSITION OF FOOD CONSUMPTION BY POVERTY STATUS, 2018/19

Expenditure item	Lao PDR		Urban		Rural	
	Poor	Non-poor	Poor	Non-poor	Poor	Non-poor
Rice	44.7	28.6	37.6	24.4	45.7	31.2
Other cereals and bread	2.1	2.7	2.2	3.2	2.0	2.4
Meat	17.5	24.1	18.3	23.0	17.4	24.8
Fish	12.2	12.8	13.7	10.9	12.0	13.9
Milk, cheese and eggs	1.7	3.0	2.9	3.9	1.6	2.4
Oils	0.3	0.4	0.4	0.4	0.2	0.4
Fruits	1.3	2.7	1.9	3.5	1.2	2.3
Vegetables and tubers	14.8	11.6	12.7	9.9	15.1	12.6
Sugar and sweets	0.5	0.9	0.7	1.1	0.4	0.8
Beverages	1.0	3.3	2.6	4.3	0.7	2.7
Other food	2.8	3.4	3.1	3.0	2.8	3.7
Meals in restaurants	1.2	6.4	3.8	12.4	0.8	2.8

Source: Authors' calculations from LECS 6.

Note: LECS5 consumption is based on a 30-day diary. LECS6 consumption is based on a 14-day diary.

The share of rice expenditure among non-poor households is substantially lower. The poor spend 44.7 percent of their food consumption on rice, compared with 28.6 percent among the non-poor (Table 22), a gap that is consistent across urban and rural areas. Poor households also spend more on vegetables and tubers. Non-poor households, in contrast, spend a greater share on meat, beverages, restaurant meals and takeaways. Especially in urban areas, where purchased meals are more common, the average spending share for non-poor households on this category is 12.4 percent, compared with 4 percent for the urban poor. The urban poor have a larger share of expenditure on fish than the rural poor. This could reflect higher consumption due to diet preferences for different types of fish (fresh, dried, fermented) or fish-based meals served by restaurants and takeaways.

Almost 20 percent of the population experienced moderate-to-severe food insecurity in 2018/19 (Table 23). Food insecurity refers to a lack of regular access to enough safe and nutritious food for normal growth and development, and to lead an active and healthy life. This can be due to the unavailability of food and/or lack of resources. In 2018/19, 10 percent of the population experienced moderate food insecurity, meaning they reduced the quality or quantity of their food, and were uncertain about their ability to obtain food due to lack of resources.⁵ This increased their likelihood of malnutrition, including the risk of stunting in children. In addition, 9 percent of the population faced severe food insecurity, meaning they ran out of food altogether and/or went for a day or more without eating.

TABLE 23: FOOD SECURITY BY URBAN-RURAL AND REGION, 2018/19

	No food insecurity	Mild food insecurity	Moderate food insecurity	Severe food insecurity
Lao PDR	69%	12%	10%	9%
Urban	80%	9%	5%	6%
Rural	63%	14%	12%	11%
Region				
Vientiane Capital	92%	5%	2%	1%
North	70%	10%	10%	10%
Central	58%	17%	14%	11%
South	71%	11%	8%	10%

Source: Authors' calculations from LECS 6.

Food insecurity is more common in rural areas and the central region. In 2018/19, nearly a quarter of the rural population experienced moderate-to-severe food insecurity compared to 11 percent of city dwellers. Urban residents were also less likely to experience even mild food insecurity. However, the nature of food insecurity in urban and rural areas differs significantly. Rural populations are typically able

to produce their own food, rendering them dependent on agricultural yields, while urban people are highly dependent on markets and are as such vulnerable to adverse food price shocks. The prevalence of moderate-to-severe food insecurity was highest in the central region, at 25 percent, compared to around 20 percent in the northern and southern regions and just 3 percent in Vientiane Capital.

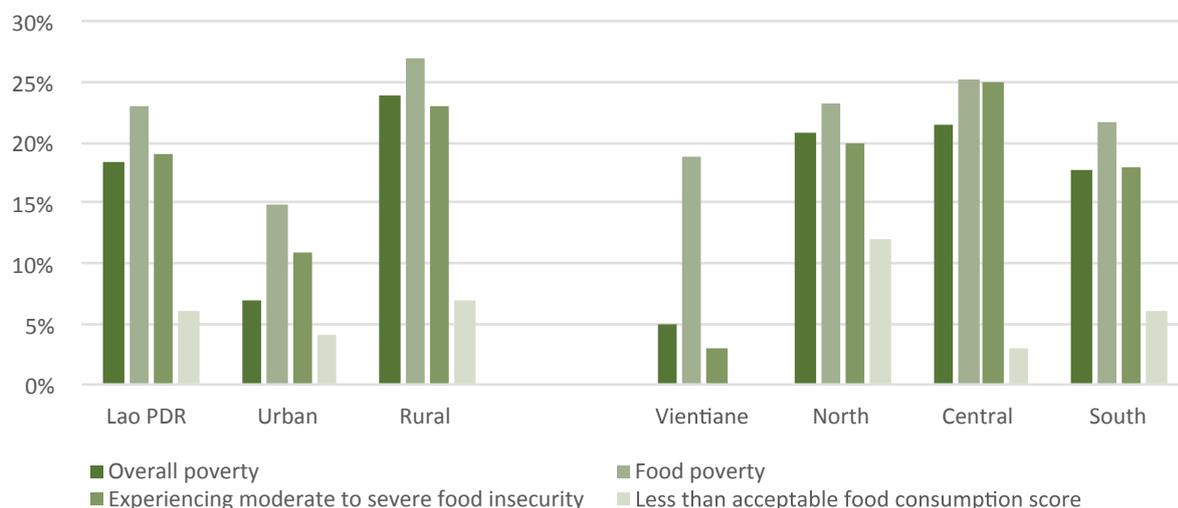
⁵ The Food and Agriculture Organization.

TABLE 24: FOOD CONSUMPTION SCORE BY URBAN-RURAL AND REGION, 2018/19

	Poor	Borderline	Acceptable
Lao PDR	2%	4%	94%
Urban	1%	3%	96%
Rural	2%	5%	93%
Region			
Vientiane Capital	0%	0%	100%
North	4%	8%	88%
Central	1%	2%	97%
South	2%	4%	94%

Source: Authors' calculations from LECS 6.

FIGURE 11: FOOD POVERTY, FOOD INSECURITY AND LACK OF DIETARY DIVERSITY BY GEOGRAPHICAL LOCATION, 2018/19



Source: Authors' calculations from LECS 6.

Households in the central region, however, have a better-quality diet than their northern and southern counterparts. The Food Consumption Score (FCS) measures dietary diversity, which is critical to ensure adequate intake of essential nutrients. More than 90 percent of the population records an acceptable dietary diversity (Table 24). However, this masks disparities across regions. The entire surveyed population in Vientiane Capital had an acceptable diet, closely followed by the central region (97 percent). In the northern region, 12 percent of the population was at risk of nutritional deficiencies.

Food poverty and food insecurity are common, especially in rural areas (Figure 11). Both are more frequently observed in the central region, followed by the northern region, the southern region, and Vientiane Capital. Poor dietary diversity, conversely, is mostly observed in the north, with 12 percent reporting a poor diet, compared to the national average of 6 percent.

Summary

The overall share of food consumption increased slightly between 2012/13 and 2018/19, with the average share of milk, cheese and eggs, vegetables and tubers increasing at the expense of rice and fish. Poor households spend a larger share on food consumption than non-poor households and rely more on their own food production, especially in rural areas. Poor

households also spend more on vegetables and tubers while non-poor households spend a greater share on meat, beverages, and restaurants/ takeaway meals. Food poverty and food insecurity are regular occurrences. Almost 20 percent of the population experienced moderate to severe food insecurity in 2018/19, particularly in rural areas and the central region.



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Chapter 4: Multidimensional poverty and access to services

Household assets and living conditions

Poverty reduction across Lao PDR over the past six years has involved significant improvements to household living conditions. Ownership of consumer durables increased significantly between 2012/13 and 2018/19 (Table 25). The proportion of households with refrigerators increased from 56.3 percent to 71.3 percent, and ownership of washing machines rose from 14.7 percent to 26.4 percent, of electric rice cookers from 47.0 percent to 57.0 percent, and steam rice cookers from 76.3 percent to 91.4 percent. Just over 85.6 percent of households could be reached by mobile phone in 2018/19, up from 76 percent in 2012/13. Motorbikes were equally essential, with 85.8 percent of households having at least one motorbike in 2018/19, up 6.4 percentage points from 2012/13.

Significant increases in possession of a motorbike, a refrigerator, a steam rice cooker, a television and a mobile phone are observed even among poor households between 2012/13 and 2018/19. For example, more than one-third of poor households owned a refrigerator in 2018/19, up from a quarter in 2012/13. Mobile phone ownership also improved among poor households, from 52.7 percent to 67.7 percent. Nevertheless, ownership of assets remains higher among households with higher consumption, and poor households typically do not own relatively expensive items. In 2018/19, less than 5 percent of poor households owned a car, a washing machine, a computer or an air conditioner.

TABLE 25: CHANGES IN HOUSEHOLD DURABLES POSSESSION, 2012/13–2018/19

	Lao PDR		Poor		Non-poor	
	2013	2019	2013	2019	2013	2019
Car	16.3	20.2	2.2	3.3	19.7	22.8
Motorbike	79.4	85.8	59.6	71.2	84.2	88.1
Bicycle	29.8	21.2	18.5	12.0	32.4	22.6
Refrigerator	56.3	71.3	20.3	35.6	64.9	76.9
Washing machine	14.7	26.4	0.6	3.9	18.1	29.9
Electric rice cooker	47.0	57.0	14.0	22.9	54.9	62.3
Steam rice cooker	76.3	91.4	67.4	90.3	78.4	91.5
Television	75.0	81.3	46.2	54.7	81.9	85.5
Radio, VCD	19.6	21.3	17.2	12.0	20.1	22.8
Telephone	30.0	18.8	22.0	20.7	31.9	18.5
Mobile phone	76.0	85.6	52.7	67.5	81.5	88.4
Computer	7.5	8.1	0.2	0.5	9.3	9.3
Air conditioner	5.1	9.6	0.1	0.5	6.3	11.1

Source: Authors' calculations from LECS 5 and LECS 6.

Lao households, including the poor, typically invested in more expensive and better-quality housing materials since the last survey. The proportion of homes with exterior walls mainly built with bricks or concrete rose substantially by 16.8 percentage points, from 41.0 percent in 2012/13 to 57.8 percent in 2018/19. The share of households in houses with tiles as their main roofing material increased by 15.6 percentage points to 49.1 percent, and those with floor tiles or cement as the main floor material by 13.2 percentage points to 57.2 percent (Table 26). Such improvements were, however, smaller among poor households. For example, the proportion of poor households using bricks or

concrete as their main exterior wall material rose by 10.2 percentage points to 21.5 percent, while for non-poor households, it increased by 15.4 percentage points to 63.4 percent. As a result, the majority of poor households still use low-quality housing materials, with around 72 percent using unbaked brick, wood or bamboo as their main exterior wall material, and 55 percent using wood or bamboo as their main floor material. Between 2012/13 and 2018/19, poor households typically swapped their roofing material from grass, leaves or wood to metal sheets, while non-poor households upgraded from metal sheets to roofing tiles.

TABLE 26: HOUSING CHARACTERISTICS BY POVERTY STATUS, 2012/13–2018/19

	2012/13			2018/19		
	Lao PDR	Poor	Non-poor	Lao PDR	Poor	Non-poor
Exterior wall major material						
Brick or concrete	41.0	11.7	48.0	57.8	21.5	63.4
Unbaked brick, wood or bamboo	58.3	87.6	51.4	37.6	71.9	32.2
Other material	0.7	0.7	0.7	4.7	6.7	4.4
Roof material						
Wood	1.6	3.2	1.2	1.2	2.7	1.0
Metal sheets	56.9	56.3	57.1	46.3	62.2	43.9
Roofing tiles	33.5	21.9	36.2	49.1	27.9	52.4
Grass or leaves	5.2	13.5	3.2	1.9	6.3	1.3
Other material	2.9	5.2	2.4	1.5	0.8	1.6
Floor material						
Marble or ceramic tiles	0.6	0.3	0.6	1.3	0.9	1.4
Floor tiles or cement	44.0	13.0	51.3	57.2	25.5	62.1
Wood or bamboo	50.1	74.8	44.2	34.2	55.3	30.9
Earth, clay or other	5.4	11.9	3.8	7.3	18.3	5.6

Source: Authors' calculations from LECS 5 and LECS 6.

Household access to services

There was a remarkable improvement in access to basic services between 2012/13 and 2018/19. In 2018/19, 92.9 percent of households had access to safe water throughout the year, increasing from 83.8 percent in 2012/13, and approximately 82 percent of households had access to improved sanitation facilities (Table 27).⁶ Access to electricity reached 92.9 percent – a significant improvement from coverage of 80 percent in 2012/13. Rural areas saw significant improvements and accounted for the large share of the improvement in access to safe water and electricity. Nevertheless, the use of firewood

and charcoal as the main source of cooking energy remains prevalent in rural areas. Just 7 percent rural households used gas or electricity as their main source of cooking energy, compared to 21.3 percent in urban areas. However, access to all services is significantly lower among the poor when compared to the non-poor. Access to improved sanitation facilities was 74.3 percent among poor households, well beneath 97 percent access among the non-poor. The gap is narrower for access to safe water and electricity, however.

TABLE 27: HOUSEHOLD ACCESS TO IMPROVED WATER, SANITATION FACILITIES AND ELECTRICITY, 2012/13–2018/19

	Safe water		Improved sanitation facilities	Electricity for lighting		Gas and electricity for cooking	
	2013	2019	2019	2013	2019	2013	2019
Lao PDR	83.8	92.9	82.1	79.6	92.9	6.0	11.9
Poor	73.8	82.5	52.8	54.4	78.7	2.0	4.6
Non-poor	86.2	94.5	86.7	85.6	95.1	6.9	13.0
Urban	93.9	98.6	97.0	98.8	99.5	12.6	21.3
Rural	79.4	89.9	74.3	71.2	89.5	3.1	6.9

Source: Authors' calculations from LECS 5 and LECS 6.

Note: : Information on improved toilet is not comparable between LECS5 and LECS6.

TABLE 28: NET ENROLMENT RATE AND AVERAGE YEARS OF SCHOOLING BY POVERTY STATUS, 2012/13–2018/19

	Net enrollment rate (%) (Age 6-10)		Net enrollment rate (%) (Age 11-14)		Average years of schooling (Age 15+)	
	2013	2019	2013	2019	2013	2019
Poor	65.0	72.9	20.0	32.5	3.5	3.7
Non-poor	82.7	86.7	45.3	66.2	5.8	6.5

Source: Authors' calculations from LECS 5 and LECS 6.

⁶ Safe water sources include piped water, protected boreholes or wells, rainwater, and packaged or delivered water. Improved sanitation facilities include flush/pour flush to piped sewer system, septic tanks or pit latrines; ventilated improved pit latrines, composting toilets or pit latrines with slabs.

Despite an overall increase in net enrollment at both primary and lower secondary levels, a large educational gap remains between the poor and non-poor (Table 28).⁷ Net primary school enrollment among poor children aged 6-10 years rose by 7.9 percentage points to 72.9 percent, compared to a 3.8 percentage point increase among non-poor children. As a result, the net primary school enrollment gap between the poor and the non-poor contracted somewhat from 17.8 percent in 2012/13 to 13.7 percent in 2018/19. In contrast, the net lower secondary school enrollment gap widened. Enrollment among non-poor children aged 11-14 years increased by 20.9 percent to 66.2 percent, compared to a 12.4 percentage point increase to 32.5 percent among poor children. Overall, average years of schooling remain at around 6 years in Lao PDR, with the poor on average having just 3.7 years of education.

There remains a large rural-urban difference in access to health facilities, even as access to health care improved in general. About 88 percent of the population in 2018/19 lived in villages within 10 km of a health centre, compared to only 63 percent in 2012/13 (Figure 12). Access to advanced health care remain limited, with 60 percent of the population in 2018/19 living in villages within 10 km of a hospital, up slightly from 52 percent in 2012/13 (Figure 13). More than 10 percent of the population lived in villages more than 30 km away from a hospital. Access is more limited among the poor and people in rural areas without road connectivity. Almost one-third of the population in rural villages without road access, and a quarter of the poor, lived further than 30 km from a hospital in 2018/19.

FIGURE 12: DISTANCE TO THE NEAREST HEALTH CENTRE, 2018/19

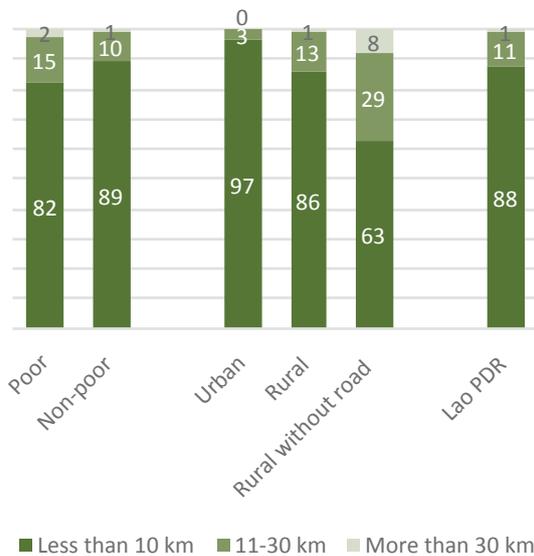
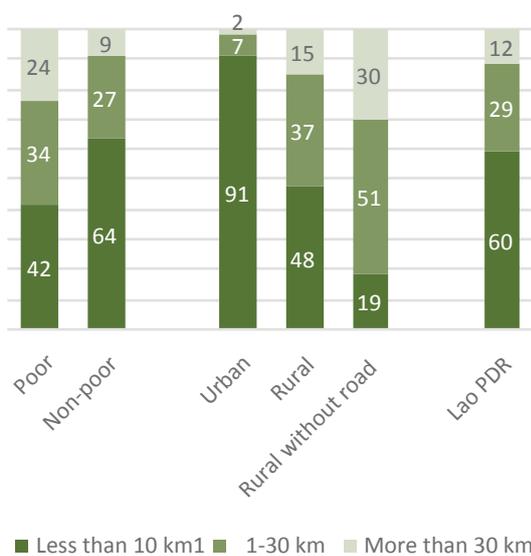


FIGURE 13: DISTANCE TO THE NEAREST HOSPITAL, 2018/19



Source: Authors' calculations from LECS 6.

⁷ Net enrollment rate is the number of boys and girls of the age of a particular level of education that are enrolled in that level of education, expressed as a percentage of the total population in that age group.

Multidimensional poverty

In order to summarize household deprivation in different dimensions, the multidimensional poverty measure for Lao PDR is constructed based on available information from the LECS5 and LECS6. Multidimensional poverty encompasses various deprivations experienced by the poor in their daily lives by capturing the non-monetary dimensions of well-being (consumption, education, and living standards) alongside the monetary measure (Table 29).⁸

The intensity of deprivation is the weighted average of indicators in which a household is deprived. If an individual household is not deprived in any dimension, the intensity is

considered to be 0, rising to 1 if an individual household is deprived in every dimension. A household is considered multidimensionally poor if it is deprived in a third or more of eight weighted indicators, that is if the total intensity of deprivation is larger than 0.33. Given the equal weight of 0.33 assigned to each of the three dimensions, if a household is deprived in at least one dimension, the members are considered multidimensionally poor. As the monetary dimension is measured using only one indicator, any individuals who are poor in consumption terms will be considered multidimensionally poor.

TABLE 29: DIMENSIONS OF POVERTY

Dimension	Indicator	Deprived if...	Weight
Consumption	Household's consumption per capita	Household's consumption per capita is below the poverty line (calculated using the cost of basic needs approach)	1/3
Education	Years of schooling	No household member aged 10 years or older has completed five years of schooling	1/6
	School attendance	No school-aged children (up to 14) are attending school	1/6
Living standards	Cooking fuel	The household cooks with paraffin, wood, coal, charcoal, or sawdust	1/15
	Drinking water	The household does not have access to improved drinking water, or if safe drinking water is at least a 30-minute walk (round-trip) from home	1/15
	Electricity	The household has no electricity	1/15
	Housing	The household floor is made of earth or clay, the roof is made of grass or leaves, or walls are made of natural or rudimentary materials (unbaked bricks, bamboo, tin, or wood)	1/15
	Assets	The household does not own more than one of these assets: radio, TV, computer, bicycle, motorbike, refrigerator, and does not own a car or truck	1/15

Multidimensional poverty declined between 2012/13 and 2018/19, mirroring consumption poverty trends. In 2018/19, 22 percent of the population was multidimensionally poor (Figure 14). Between 2012/13 and 2018/19, the incidence of multidimensional poverty declined,

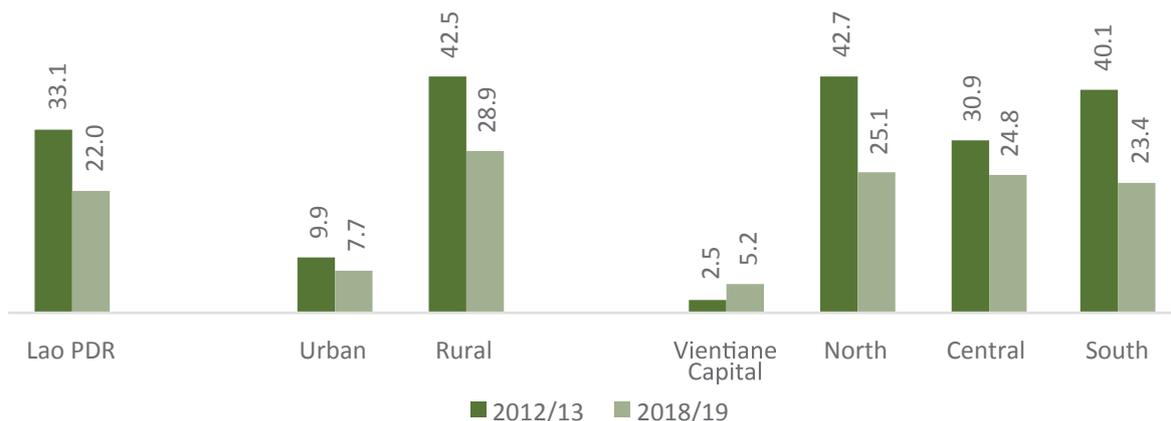
with a substantial reduction in rural areas. While the multidimensional poverty headcount rate fell slightly from 9.9 percent to 7.7 percent in urban areas, rural poverty fell by 13.6 percentage points to 28.9 percent.

⁸ In this report, housing and assets are added to the basic infrastructure dimension, making it resemble the living standards dimension of the global MPI developed by the Oxford Poverty & Human Development Initiative (OPHI) and the United Nations Development Programme (UNDP). Due to a lack of comprehensive assessments of health outcomes in Lao PDR, this dimension is not included.

The northern and southern regions experienced a substantial decline in multidimensional poverty. Similar to consumption poverty trends, the pace of poverty reduction was slowest in the central region, where the multidimensional poverty headcount rate fell by 6 percentage points to 25 percent. The poverty headcount rate almost

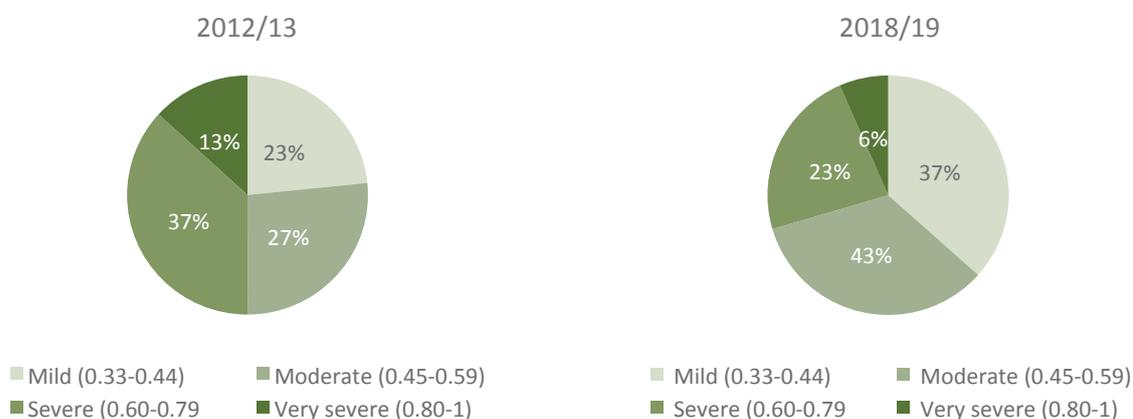
halved from 40.1 percent to 23.4 percent in the southern region and dropped from 42.7 percent to 25.1 percent in the northern region. In 2018/19, the southern region showed the lowest incidence of both consumption poverty and multidimensional poverty.

FIGURE 14: MULTIDIMENSIONAL POVERTY HEADCOUNT RATE (PERCENT)



Source: Authors' calculation based on LECS5 and LECS6.
Note: Moderate poverty (cutoff ≥ 0.33).

FIGURE 15: PERCENTAGE OF THE MULTIDIMENSIONALLY POOR AT DIFFERENT LEVELS OF DEPRIVATION, 2012/13-2018/19

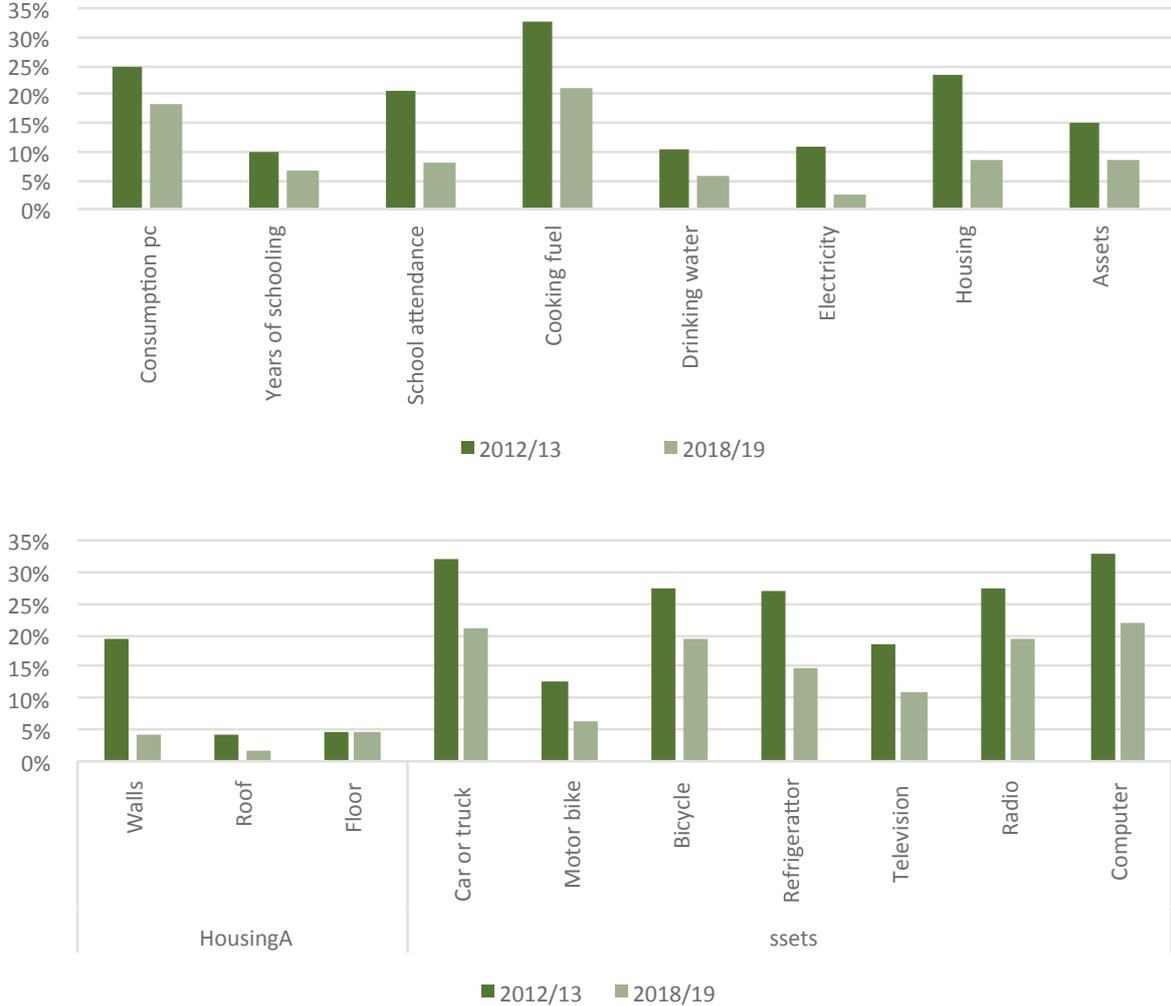


Source: Authors' calculation based on LECS5 and LECS6.
Note: The intensity of multidimensional poverty measured by the average proportion of dimensions in which multidimensionally poor people are deprived (0 = none, 1 = all).

The intensity of multidimensional poverty has declined. Among the multidimensionally poor, the intensity of deprivation can range from 0.33 to 1, where 1 corresponds to a deprivation of all indicators. In 2012/13, half of the multidimensionally poor were severely or very

severely deprived (deprived in more than 60 percent of eight weighted indicators). The share of the multidimensionally poor who faced severe or very severe deprivations declined dramatically, to 30 percent in 2018/19 (Figure 15).

FIGURE 16: PERCENTAGE OF THE POPULATION WHO ARE MULTIDimensionALLY POOR AND SIMULTANEOUSLY DEPRIVED IN EACH INDICATOR



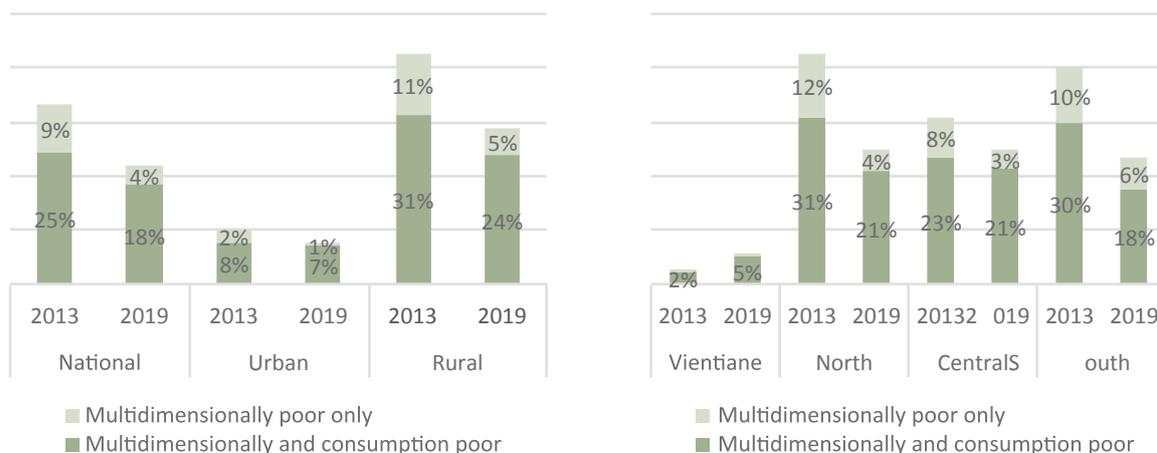
Source: Authors’ calculation based on LECS5 and LECS6
Notes: Censored headcount ratio of an indicator is the percentage of the population who are multidimensionally poor and simultaneously deprived in each indicator.

Most of the multidimensionally poor are deprived of cooking fuel. The share of the population who are multidimensionally poor and simultaneously deprived in the cooking fuel dimension was 21 percent in 2018/19, meaning that multidimensionally poor households in Lao PDR were almost guaranteed to cook with paraffin, wood, coal, charcoal, or sawdust (Figure 16). The share is significantly lower for other indicators. Around 8 percent of the population were multidimensionally poor and deprived in the housing dimension, meaning more than half of multidimensionally poor households invested in high-quality housing materials.

The incidence of deprivations among the multidimensionally poor improved across all

indicators, especially in school attendance and housing. In 2018/19, only 8 percent of the population were multidimensionally poor and did not have their children enrolled in school, compared to 21 percent in 2012/13. The quality of housing materials improved particularly with regard to wall materials. The share of the population who are multidimensionally poor and use poor-quality wall materials fell from 20 percent to 4 percent between 2012/13-2018/19. Ownership of motorbikes, refrigerators and televisions substantially increased among the multidimensionally poor. However, ownership of cars or trucks and computers remains almost non-existent among multidimensionally poor households.

FIGURE 17: PERCENTAGE OF THE CONSUMPTION POOR AND THE MULTIDIMENSIONALLY POOR



Source: Authors' calculation based on LECS5 and LECS6

Non-monetary poverty is more common in rural areas where living standards and access to services remain low. In 2018/19, 5 percent of the rural population were deprived in education or living standards but were not considered as consumption poor (Figure 17).⁹ This mismatch is a result of lower school attendance and living standards in rural areas, such as the use of wood

and charcoal in cooking fuel and poor housing conditions. Nevertheless, there has been a significant improvement in non-monetary welfare indicators in rural areas. The share of the rural population whose consumption was larger than the poverty line but were deprived in education or living standards halved from 11 percent in 2012/13 to 5 percent in 2018/19.

Summary

Improvements in monetary indicators of poverty over the past six years have been associated with significant improvements in non-monetary aspects of household welfare. Households invested in housing and durable assets across the board. Ownership of essential assets significantly improved among poor households. More households now have access to services like safe drinking water, improved toilets, electricity and health care services. Net enrolment increased compared with previous years but remains higher among the non-poor than the poor, especially in secondary school enrollment. Multidimensional

poverty captures the non-monetary dimensions of well-being alongside the monetary measure. The incidence of multidimensional poverty declined between 2012/13 and 2018/19, especially in rural areas, the northern region and the southern region, mirroring a decline in monetary poverty. Nevertheless, non-monetary poverty is more pronounced in rural areas where living standards remain low, with 5 percent of the population living above the consumption poverty line but considered to be multidimensionally poor.

⁹ The difference between the monetary and the multidimensional measures is the result of non-monetary deprivations. This pattern emerges because the weight assigned to the consumption dimension is one third, and a household is considered multidimensionally poor if the intensity of deprivation is larger than 0.33. Therefore, any individuals who are consumption poor will be automatically multidimensionally poor.





Chapter 5: Conclusion



Poverty continues to decline in Lao PDR. Between 2012/13 and 2018/19, the incidence of poverty declined from 24.6 percent to 18.3 percent. This implies that almost one-fifth of the Lao PDR population currently live on less than LAK 9,364 per person a day.

A revision of the poverty methodology in LECS 6 ensures that poverty measures align with the minimum basic needs and spending patterns of the current Lao PDR population. The estimates based on the revised poverty methodology suggest that the incidence of poverty declined by 6.3 percentage points to 18.3 percent in 2018/19. This figure is slightly larger but comparable to estimates based on the old poverty methodology. Both methodologies show that Lao PDR continues to make progress in reducing poverty. Poverty has declined by more than half between the time of the first LECS survey in 1992/93 and 2018/19.

Over the six-year period between 2012/13 and 2018/19, poverty fell across regions and provinces. The northern and southern provinces are experiencing a rapid reduction in poverty except in Attapeu, which experienced severe flooding after the Xe Pian-Xe Namnoy hydropower dam collapsed in 2018. Poverty has declined rapidly along the China-Myanmar and Cambodia borders. However, poverty reduction has stagnated in central Lao PDR, previously the wealthiest region. The rural-urban gap and disparities across provinces have narrowed. Yet, due to widening consumption gaps within regions, inequality has risen. Consumption grew at a faster pace among the better off, with average consumption per capita of the bottom 40 percent growing by 2.1 percent per year compared to 4.1 percent among the richest quintile. Per capita consumption growth was significantly lower than GDP growth, which, combined with rising inequality, contributed to a slower pace of poverty reduction relative to growth. Poverty would have declined by an additional 4.2 percentage points if inequality had remained stable.

Poverty remains higher among ethnic minorities (Chine-Tibet, Hmong-lumien and Mon-Khmer) than among the Lao-Tai majority. Only the

Chine-Tibet ethnic group saw a rapid decline in poverty between 2012/13 and 2018/19, thus narrowing the gap between the Lao-Tai ethnic group. The incidence of poverty is typically higher among agricultural households, Hmong-lumien households and households headed by a person who has not completed lower secondary education or an unemployed person. These groups have also experienced the slower pace of poverty reduction during the past six years. Progress in poverty reduction in targeted priority districts has been moderate compared to non-priority districts, resulting in a consistently large gap between the two.

Although the significant share of the poor continues to be found in rural areas, the share in urban areas and the central region has risen. Despite maintaining its share of the total population at 36 percent, the central region in 2018/19 made up 41.9 percent of the poor, a considerable increase from 34 percent in 2012/13. Five large provinces account for more than half of the poor in Lao PDR. Savannakhet alone accounts for 20.6 percent of the poor population. The other four provinces with a higher share of the poor are Oudomxay (8.7 percent), Khammuane (8.3 percent), Saravane (8.0 percent), and Luangprabang (7.7 percent). These provinces have large shares of the population as well as high poverty incidence.

Improvements in monetary indicators of poverty over the past six years has been associated with significant improvements in non-monetary aspects of household welfare. Households invested in housing and durable assets across the board. Ownership of essential assets significantly improved among poor households. More households now have access to services like safe drinking water, improved toilets, electricity and health care services. Net school enrolment increased but remains higher among the non-poor than the poor, especially in secondary school enrollment. The incidence of multidimensional poverty declined between 2012/13 and 2018/19, especially in rural areas, the northern region and the southern region, mirroring a decline in monetary poverty. Nevertheless, non-monetary poverty is more pronounced in rural areas, where living

standards remain low, with 5 percent of the population living above the consumption poverty line but considered to be multidimensionally poor. Food and nutrition insecurity remain pressing problems among low-income

households in rural areas who rely mostly on home-produced foods. Almost 20 percent of the population experienced moderate to severe food insecurity in 2018/19, with the incidence in rural areas double that of urban areas.



Annex 1: Poverty measurement methodology for LECS 6

Survey methodology

The Lao Statistics Bureau (LSB) has conducted the Lao Expenditure and Consumption Survey (LECS) at five-year intervals since 1992/93. The sixth and most recent round (LECS6) was implemented between June 2018 and May 2019, following the LECS5, which was conducted between April 2012 and March 2013. The objective of the surveys is to assess the living standards of the population and generate necessary data for socioeconomic planning. The LECS is the primary source of official poverty statistics in Lao People's Democratic Republic (PDR), providing critical information for monitoring progress on poverty reduction, identifying poor and vulnerable groups, and ultimately informing government policies for poverty eradication.

Survey design. The LECS6 sample is composed of 10,144 households from 634 villages. The sample selection is conducted in two steps. The first stage is a selection of sample villages using the probability proportional to size sampling method. Villages are grouped by province and village type (urban, rural area with road access, and rural area without road access). The number of sample villages in each province is between 25 and 46 depending on the number of villages and the number of households in every survey area. In the second-stage sampling, 16 households are selected in every sample village.

Survey instrument. LECS 6 consists of five main sets of questions (modules):

- i diary – on the daily expenditure and consumption of the household
- ii household questionnaire – on the household's situation, including employment, health, income, housing, and business activities
- iii time used – on the time allocation of the household
- iv prices – on prices in the market and village shops; and

- v village questionnaire – questions concerning the village for the village chief.

The household questionnaire in turn comprises 15 modules, including household composition, parents of each household member, education, employment, migration, nutrition, asset ownership, housing conditions, construction activities, household business, agriculture, health, purchases of durable goods, income and transfers, and borrowing and lending.

Daily expenditure and consumption of the household are collected using a 14-day diary in LECS 6, marking a change from the 30-day diary used from LECS 1 to LECS 5. The number of transactions recorded by households typically declined over the 30-day diary period, suggesting that a shorter diary period would improve data reliability. However, the change to a 14-day period means that poverty estimates between LECS 6 and LECS 1-5 are non-comparable. To mitigate this impact, the change to the diary period was implemented alongside the collection of 30-day diary data from a smaller sample to reconcile survey estimates over time (Table 1). Of the total of 10,028 responding households, consumption expenditure of 8,457 households was recorded using a 14-day diary and consumption expenditure of 1,576 households was recorded using a 30-day diary. This allows for a comparison of trends in a consumption aggregate before and after the change in methodology.

Data collection. Fieldwork was conducted for 12 months between 1 June 2018 and 31 May 2019. The LECS data was collected for the first time using computer-assisted personal interviews (CAPI). The method has been proven to speed the processing and release of the data.

Revised poverty methodology

In most countries, poverty methodology is occasionally revised to reflect the evolution of the minimum basic needs and spending patterns of the poor, in turn caused by growth in living standards and changes within society. Lao PDR's previous poverty methodology was established in 1997/98. Robust growth and policy reforms during the last decade created the need to rebase poverty measures to align them to the minimum basic needs and spending patterns of the Lao population in 2019. The revisions are based on LECS 6 data and include two major changes: i) redefinition of minimum living standards; and ii) redefinition of a consumption aggregate to standardize the treatment of nonfood items, which were previously excluded or unconventionally treated.

Poverty line

The new poverty line is constructed using LECS 6 following the cost of basic needs approach to replace the existing poverty line, which was established more than 20 years ago based on LECS2, which was conducted in 1997/98.

A reference poor population is defined through an iterative process and a basket of goods is defined to reflect the consumption patterns of this group. In the first iteration, households are ranked by nominal consumption per capita and an a priori reference population is chosen. The first iteration yields the reference basket, the price deflator and the poverty line. In subsequent iterations, households are ranked by real consumption per capita, and the reference basket, the price deflator and the poverty line are updated. The iterative process continues until the poverty estimate converges.

From this process, households in the 10th through 30th percentiles of spatially - and temporally - deflated consumption per capita are chosen as a reference group. The quantity of food consumed by the reference group is converted into calories consumed using calorie conversion factors. The average cost per calorie is calculated by dividing the total calorie content of the basket by total basket expenditure. This amount is multiplied by the minimum nutritional requirement for Lao PDR, which is defined as 2100 Kcal per day as in the previous poverty methodology, to give the food poverty line.

To set a poverty line, the nonfood component is inflated from the food poverty line using the share of nonfood to total consumption. As there is no consensus on whose share of nonfood consumption should be used, the nonfood poverty line is the simple average of the lower and upper bounds. The lower bound is the amount that households who have total consumption equal to the food poverty line spend on nonfood items. The upper bound is the amount that households who have food consumption equal to the food poverty line spend on nonfood items. In practice, the average share of nonfood items in total consumption of a group of households whose total consumption (food consumption) is within a 10-percent range of the food poverty line is used to inflate the food poverty line for obtaining the lower bound (the upper bound).

TABLE 30: REFERENCE BASKET FOR THE POVERTY LINE

Food item		Nonfood item	
1	Glutinous rice	1	Beer Lao
2	Ordinary rice	2	Sticky rice alcohol
3	Dry noodles	3	Cigarettes
4	Bread and cake	4	Men clothes
5	Pork	5	Women clothes
6	Beef	6	Footwear
7	Chicken	7	House rent
8	Duck, other birds	8	Water charges
9	Meat from hunting	9	Electricity
10	Fresh fish	10	Charcoal and Firewood
11	Fresh milk	11	Detergent
12	Eggs	12	Medicines
13	Vegetable oil	13	Parts and accessories incl. car batteries
14	Oranges	14	Repair charges
15	Chili	15	Gasoline, petrol
16	Cucumber	16	Diesel oil
17	Cabbage	17	Bus fares
18	Chinese cabbage	18	Mobile phone charges
19	Bamboo shoots	19	Tuition fees
20	Sweets	20	School uniform
21	Coffee	21	Stationery for school
22	Salt	22	Toilet soap
23	Spices and seasoning	23	Shampoo
24	Bottled water	24	Toothpaste
25	Soft drink		
26	Vegetables, grown		
27	Vegetables, collected		
28	Takeaway food		

The consumption basket represents the consumption patterns of the reference group. The food basket comprises a list of food items, each accounting for more than 0.2 percent of total food expenditure. The nonfood basket comprises a list of nonfood items, each accounting for more than 0.3 percent of nonfood expenditure. Newly added items across both baskets include duck, fresh milk, vegetable oil, coffee, take away food, utilities, medicines, gasoline, diesel oil, mobile phone charges, among others, reflecting

changes in the consumption pattern of the reference group (see Table 30).

Spatial price indices are used to spatially deflate the consumption aggregate. Spatial price indices for four different regions (Vientiane Capital, north, central, south), with each split into urban and rural areas creating eight subregions in total, are derived using the consumption basket and spatial price data according to Equation 1:

$$\hat{p} = S_o^f \frac{\sum_{i=1}^{N_f} s_{oi} p_{ri}}{\sum_{i=1}^{N_f} s_{oi} \bar{p}_i} + S_o^{nf} \frac{\sum_{i=1}^{N_{nf}} s_{oi} p_{ri}}{\sum_{i=1}^{N_{nf}} s_{oi} \bar{p}_i}, \quad (1)$$

where S_o^f is the share of food expenditure and S_o^{nf} is the share of nonfood expenditure of the reference group, s_{oi} is the fixed share of item i in the consumption basket, p_{ri} is price of item i in each of the eight subregions r , and \bar{p}_i is the national average price. The unit prices from the diary are used to obtain prices for food items and village prices for nonfood items. The consumer price index data is used for nonfood items for which village prices are not available including mobile phone charges, housing rents, water charges, electricity charges, repair charges and car batteries. In addition, the consumption aggregate is adjusted for within survey temporal price differences. Data collection in the LECS spans a period of 12 months. The consumption aggregate is therefore adjusted for price differences across different months of the data collection period using the monthly consumer price index (CPI) between June 2018 and May 2019.

Consumption aggregate

Lao PDR followed common practice in using a consumption-based welfare measure. This is reflected in the LECS questionnaire, where detailed information on household consumption expenditure is recorded. A household diary is the principal instrument for collecting expenditure and consumption data on a detailed set of food and nonfood items. In LECS6, there is a change in the treatment of nonfood consumption items that were previously excluded or unconventionally treated. This followed a well-established practice according to which a consumption aggregate is constructed by putting together four building blocks, namely (i) food consumption, (ii) nonfood consumption, (iii) durable goods, and (iv) housing.¹⁰

Food consumption. Food consumption in the consumption aggregate includes food items purchased from the market, own food consumption, food received in-kind, and meals in restaurants and hotels purchased by household members. Following previous practices, self-valued consumption expenditures have been used in generating value for own food consumption and in-kind food expenditure.

Nonfood consumption. Nonfood consumption items in the diary comprise alcohol and tobacco; clothing and footwear; housing; fuel and utilities rent; transportation and communication education expenses; medical expenses; personal care; utensils and sundries; recreation; accommodation in hotels and other temporary lodging; expenses on traditional and cultural activities; and other miscellaneous items.

Durable goods: Durable goods are included in nonfood consumption expenditure using the user cost approach. Their purchase and repair costs are obtained from the households' purchase of durables module with a 12-month recall period. The straight-line depreciation method is applied given the lifespan of each item. Any purchases of these durable goods recorded in the household diary are discarded. This treatment is different from previous LECS in which durable goods were selectively included using a nonstandard methodology. User costs of most lumpy durable goods were excluded from the consumption expenditure, and for those that were included, an implicit assumption of a single-year lifespan was applied.

¹⁰ Deaton and Zaidi (2002).

Housing: Rents are imputed for households using a hedonic regression that estimates the rental value of dwellings based on the dwelling's characteristics and location. Due to a small rental market in Lao PDR, the implicit rental value reported by households is used in the estimation. In contrast, housing rent payments or imputed rent were entirely excluded from the consumption aggregate in previous LECS.

Other adjustments to the consumption aggregate

Per capita normalization: As in previous LECS, household per capita consumption is used to derive individual consumption needs. This treats all members as equal consumption units, implying that household needs increase proportionally with household size.

Treatment of meals in restaurants and hotels: Households recorded meals prepared outside the household if i) they bought meals for themselves, ii) they bought meals for someone else, or iii) someone bought meals for them. The first category is included in the consumption aggregate. To avoid double counting, it was decided to treat meals a household member buys for someone else as a cost of hosting and include this in the consumption aggregate. Meals bought for a household member by someone else were thus excluded from the consumption aggregate.

Adjustment for rice: Rice is the staple food in Lao PDR. Some households did not record any rice consumption in the diary. This could be attributed to consumption of rice purchased before the diary started not being recorded. As in previous LECS, rice consumption is imputed for households with zero rice consumption using the household's reported rice consumption per capita in the nutrition module. The imputed rice consumption value is calculated using a ratio of the household rice consumption to the urban or rural regional average multiplied by the regional rice expenditure per capita and the household size.

Treatment of education expenses: In LECS 6, (monthly) education expenses recorded by households using a 14-day diary are lower on average than those recorded by subsample households using a 30-day diary. At the same time, the amount recorded in a 30-day diary and the recalled amount from the education module are not significantly different from each other. A possible explanation is that education is a low-frequency item which could be underreported when using a 14-day diary. For example, a lump sum expenditure on tuition fees for studying abroad is usually made once or twice a year. A decision was made to use the information on education expenses based on recalling, with a 365-day recall period obtained from the education module. Table 31 summarizes methodological changes between the 1997/98 poverty methodology and the revised 2018/19 poverty methodology.

TABLE 31: METHODOLOGICAL CHANGES TO THE CONSUMPTION AGGREGATE

Component	LECS5	LECS6
Food expenditures		
Food items	30-day diary	14-day diary
Unreported rice consumption	Imputed rice using information from the nutrition module	Imputed rice using information from the nutrition module
Nonfood expenditures		
Durable goods	Some durables are excluded. Those included are assumed to have a single-year lifespan	All durables are included using the straight-line depreciation method given the lifespan of each item
Housing	Excluded	Imputed rent
Education	30-day diary	1-year recall from the education module
Other nonfood items	30-day diary	14-day diary



Trend comparisons

One of the central objectives of the LECS is to provide information for monitoring progress on poverty reduction. Two elements are required to examine the evolution of poverty by comparing poverty estimates between 2012/13 and 2018/19 using the revised poverty methodology: i) a poverty line that is updated with an appropriate adjustment for price changes and ii) a consumption aggregate is made comparable between 2012/13 and 2018/19.

Poverty line. The newly constructed 2018/19 poverty line is updated backward for differences in the price levels between 2012/13 and 2018/19 to obtain poverty estimates for 2012/13. The process of updating the poverty line is done in three steps: i) adjustments for temporal price differences between LECS 5 and LECS 6; ii) adjustments for spatial price differences; and iii) adjustments for temporal price differences within the survey, since data collection spans a period of 12 months. Deflators are calculated from a Laspeyres price index based on the new reference basket separately for the food and nonfood baskets. The unit prices from the diary are used to obtain prices for food items and village prices for nonfood items. The consumer price index data is used for a within-survey temporal price adjustment and some nonfood items for which village prices are not available.

Consumption aggregate. The consumption aggregate is re-constructed for LECS 5 with the following adjustments: i) all durables are included using the straight-line depreciation method similar to LECS6; ii) imputed rent is added using a hedonic regression, the same approach adopted for LECS 6; and iii) education expenditure is replaced by a 1-year recall from the education module.

A major difference that remained between the LECS 5 and LECS 6 consumption aggregate is the diary period. It is important to note that an incomparability issue of consumption and

poverty estimates over time might have emerged from the change in the LECS questionnaire design from a 30-day diary to a 14-day diary. Several examples in other country experiences show that small differences in a questionnaire design can lead to a significant underestimation or overestimation of poverty levels. While examples are restricted to a changing recall period and the number of consumption items, the changing diary period in the LECS must be approached with caution.

Table 32 shows poverty trends using different methodologies. The trends shown in this report are based on Method I as described previously, showing that poverty declined by 6.3 percentage points to 18.3 percent in 2018/19. In Method II, survey-to-survey imputation techniques are employed to impute a consumption aggregate for LECS 5 to establish comparability as far as possible given a difference in the number of diary days between the two surveys. The imputation techniques are carried out using Stata's Multiple Imputation (MI) package. The imputed point estimates show similar poverty trends as obtained from other methods, with a slightly slower pace of poverty reduction than that of Method I. Table 33 shows the consumption models used for the survey-to-survey imputation. Lastly, Method III makes use of a 30-day diary subsample from LECS 6 to extend the existing poverty trend based on 1997/98 poverty methodology. They are representative only at the national level. The LECS 5 poverty line is updated for differences in the price levels in 2018/19 and a consumption aggregate is constructed for a 30-day diary subsample based on the previous definition. This method renders a lower rate of poverty reduction, with poverty declining by 4.6 percentage points from 23.2 percent to 18.6 percent in 2018/19.

TABLE 32: POVERTY TRENDS BY POVERTY MEASUREMENT METHODOLOGY

Methodology	2007/08	2012/13	2018/19
I. 2018/19 poverty methodology + backward updating		24.6	18.3
II. 2018/19 poverty methodology + survey-to-survey imputation		23.8-24.1	18.3
III. 1997/98 poverty methodology + 30-day diary sample	27.6	23.2	18.6

TABLE 33: CONSUMPTION MODELS USED FOR SURVEY-TO-SURVEY IMPUTATION

Characteristics of household head	Model I	Model II	
		Urban	Rural
Age	0.007 (0.002)	-0.003 (0.004)	0.005 (0.002)
Age-squared ('00)	-0.005 (0.002)	0.005 (0.004)	-0.003 (0.002)
Male	0.035 (0.022)	-0.083 (0.035)	0.047 (0.027)
<i>Marital status, base = never married</i>			
Married	-0.069 (0.034)	-0.040 (0.063)	-0.053 (0.044)
Divorced	0.064 (0.045)	0.093 (0.073)	0.038 (0.062)
Separated	-0.178 (0.042)	-0.321 (0.068)	0.004 (0.053)
Widowed	-0.046 (0.041)	-0.069 (0.066)	-0.042 (0.054)
<i>Ethnicity, base = Lao-Tai</i>			
Mon-Khmer	-0.028 (0.012)	0.061 (0.027)	-0.063 (0.013)
Chine-Tibet	-0.028 (0.025)	0.225 (0.069)	-0.144 (0.027)
Hmong-lumien	-0.071 (0.016)	0.085 (0.038)	-0.092 (0.018)
<i>Highest education, base = no formal education</i>			
Some primary	0.052 (0.013)	0.092 (0.032)	0.021 (0.014)
Completed primary	0.107 (0.012)	0.106 (0.028)	0.102 (0.013)
Completed lower secondary	0.140 (0.016)	0.156 (0.032)	0.160 (0.018)
Completed upper secondary	0.258 (0.022)	0.140 (0.036)	0.304 (0.03)
Completed vocational training	0.123 (0.023)	0.249 (0.038)	0.195 (0.034)
University degree	0.303 (0.031)	0.253 (0.041)	0.284 (0.061)

<i>Labor market status, base = out of labor force</i>			
Employed	0.070	0.258	-0.101
	(0.025)	(0.05)	(0.028)
Unemployed	0.013	0.014	-0.013
	(0.02)	(0.039)	(0.024)
<i>Sector of employment, base = not employed</i>			
Agriculture	0.138	-0.253	0.072
	(0.097)	(0.05)	(0.105)
Mining	0.077	0.114	0.134
	(0.113)	(0.139)	(0.125)
Manufacturing	0.155	-0.254	0.138
	(0.093)	(0.099)	(0.101)
Utilities	0.156	0.052	0.000
	(0.119)	(0.14)	0.000
Construction	0.202	-0.054	0.202
	(0.093)	(0.099)	(0.101)
Wholesale and retail	0.309	-0.023	0.277
	(0.093)	(0.099)	(0.103)
Transport and communication	0.262	0.101	0.206
	(0.096)	(0.102)	(0.108)
Hotels and restaurants	0.096	-0.207	-0.074
	(0.106)	(0.116)	(0.121)
Media and entertainment	0.000	-0.397	-0.186
	0.000	(0.139)	(0.162)
Other services	0.178	-0.129	0.200
	(0.094)	(0.099)	(0.105)
Public services	0.144	-0.074	0.131
	(0.092)	(0.094)	(0.101)
Other	0.259	0.059	0.178
	(0.103)	(0.125)	(0.114)
<i>Employment status</i>			
Paid worker	-0.208	-0.128	-0.020
	(0.095)	(0.079)	(0.105)
Self-employed, nonfarm	-0.270	-0.128	-0.071
	(0.095)	(0.084)	(0.104)
Self-employed, farm	-0.252	0.000	0.009
	(0.1)	0.000	(0.111)
Agriculture X Own agricultural land	0.225	-0.063	0.309
	(0.1)	(0.22)	(0.132)
Agriculture X Planting crops	-0.298	0.049	-0.339
	(0.1)	(0.222)	(0.13)
<i>Household characteristics</i>			
Household size	-0.242	-0.248	-0.222

	(0.008)	(0.013)	(0.009)
Household size—squared	0.011	0.010	0.010
	(0.001)	(0.001)	(0.001)
Dependency ratio	−0.075	−0.047	−0.141
	(0.023)	(0.043)	(0.026)
Ratio of employed people	0.073	0.105	0.028
	(0.02)	(0.039)	(0.024)
<i>Housing</i>			
Toilet	0.121	0.128	0.098
	(0.012)	(0.044)	(0.012)
Safe water	0.031	0.100	0.057
	(0.01)	(0.018)	(0.011)
Electricity	0.057		0.049
	(0.015)		(0.014)
Number of rooms	0.021	0.012	0.028
	(0.005)	(0.005)	(0.008)
<i>Asset ownership</i>			
TV, video, or phone	0.076	0.262	0.059
	(0.017)	(0.056)	(0.016)
Car	0.239	0.265	0.191
	(0.013)	(0.02)	(0.017)
Motorcycles	0.139	0.108	0.134
	(0.012)	(0.032)	(0.012)
Computer	0.206	0.247	0.181
	(0.018)	(0.023)	(0.033)
Fridge	0.143	0.279	0.121
	(0.011)	(0.025)	(0.012)
Air conditioner	0.202	0.206	0.129
	(0.021)	(0.025)	(0.042)
Washing machine	0.092	0.095	0.099
	(0.013)	(0.018)	(0.018)
<i>Village type</i>			
Rural with road access	−0.065		0.069
	(0.01)		(0.016)
Rural without road access	−0.122		
	(0.019)		
Province dummy	Yes	Yes	Yes
R-squared	0.44	0.45	0.43

Note: Robust standard errors are in parentheses.

Annex 2: Sensitivity analysis

Confidence intervals of poverty estimates

Poverty estimates in Lao PDR, like in most other countries, are generated from survey data. This means that poverty estimates presented in this report are sample statistics which estimate the true poverty rates with some error as determined by the sampling design. The extent of uncertainty from sampling error for the

poverty headcount rate is presented in Table 34 and Table 35, which show the poverty headcount rate and its 95 percent confidence interval by region and province. This allows for inference of the statistical significance of differences in poverty estimates across time or regions.

TABLE 34: CONFIDENCE INTERVALS (95 PERCENT) FOR POVERTY HEADCOUNT RATES BY REGION, 2012/2013 – 2018/19

	2012/13			2018/19		
	Poverty Headcount Rate	Confidence interval		Poverty Headcount Rate	Confidence interval	
		Lower bound	Upper bound		Lower bound	Upper bound
Lao PDR	24.6	23.5	25.8	18.3	17.3	19.4
Urban	7.9	6.5	9.3	7.0	5.7	8.2
Rural	31.4	30.0	32.9	23.8	22.4	25.2
Region						
Vientiane Capital	2.5	1.2	3.7	5.0	2.7	7.3
North	31.0	29.1	32.9	20.7	19.0	22.5
Central	23.5	21.5	25.4	21.5	19.5	23.4
South	29.9	26.8	33.0	17.7	15.6	19.8
Urban						
Vientiane Capital	1.8	0.4	3.2	4.4	2.1	6.7
North	9.9	7.1	12.7	4.6	2.8	6.5
Central	11.5	8.6	14.3	10.6	7.8	13.4
South	11.4	6.8	16.0	10.4	6.9	13.8
Rural						
Vientiane Capital	5.3	2.3	8.3	7.3	0.6	13.9
North	36.1	34.0	38.3	27.0	24.8	29.2
Central	27.6	25.3	29.9	25.0	22.7	27.4
South	34.1	30.5	37.7	19.9	17.4	22.4

Source: Authors' calculation based on LECS5 and LECS6

TABLE 35: CONFIDENCE INTERVALS (95 PERCENT) FOR POVERTY HEADCOUNT RATES BY PROVINCE, 2012/2013 – 2018/19

	2012/13			2018/19		
	Poverty Headcount Rate	Confidence interval		Poverty Headcount Rate	Confidence interval	
		Lower bound	Upper bound		Lower bound	Upper bound
Lao PDR	24.6	23.5	25.8	18.3	17.3	19.4
Vientiane Capital	2.5	1.2	3.7	5.0	2.7	7.3
Phongsaly	19.9	15.4	24.4	8.1	4.6	11.6
Luangnamtha	25.0	19.8	30.2	10.5	7.4	13.7
Oudomxay	36.6	31.2	42.1	29.2	24.5	33.9
Bokeo	51.8	45.8	57.8	19.4	14.7	24.0
Luangprabang	30.0	25.7	34.2	20.4	16.2	24.6
Huaphanh	45.4	40.6	50.3	26.6	22.0	31.2
Xayabury	15.7	12.3	19.2	21.1	17.1	25.2
Xiengkhuang	34.3	29.0	39.5	26.0	21.0	31.1
Vientiane	10.9	7.8	14.0	5.3	3.1	7.5
Borikhamxay	14.7	10.5	19.0	20.6	16.3	25.0
Khammuane	25.2	21.1	29.4	25.5	21.1	29.9
Savannakhet	29.1	25.5	32.7	27.5	23.6	31.5
Saravane	52.1	47.7	56.6	24.9	20.5	29.2
Sekong	44.4	37.7	51.1	30.6	24.6	36.6
Champasack	19.6	14.2	25.0	8.7	6.2	11.3
Attapeu	9.1	5.5	12.6	27.8	22.0	33.6
Xaysomboun				8.2	4.6	11.7

Source: Authors' calculation based on LECS5 and LECS6

Sensitivity of poverty to changes in the poverty line

Given that the distribution of expenditures is concentrated around the poverty threshold, poverty estimates in Lao PDR are very sensitive to the poverty line, so that an increase in the poverty line results in a more than proportionate change in the poverty rate (Table 36). A change in the poverty line by 5 percent would result in a higher poverty estimate by more than

13 percent in both LECS 5 and LECS 6 surveys. In contrast, the magnitude of decline in poverty when the poverty line is lower in LECS 6 is larger than in LECS 5. The difference suggests that in 2018/19, there are more poor households who lived just below the poverty line and almost escaped poverty.

TABLE 36: SENSITIVITY OF POVERTY HEADCOUNT RATE TO CHANGES IN THE POVERTY LINE, 2012/2013 – 2018/19

Percentage change	2012/13		2018/19	
	Poverty headcount rate	Change from actual (%)	Poverty headcount rate	Change from actual (%)
Actual	24.6	0.0	18.3	0.0
+5%	27.9	13.2	20.8	13.8
+10%	30.6	24.2	23.4	27.6
+20%	36.4	47.6	28.5	55.5
-5%	21.9	-11.0	15.5	-15.5
-10%	18.9	-23.5	13.0	-29.0
-20%	13.3	-45.9	8.8	-51.9

Source: Authors' calculation based on LECS5 and LECS6



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Annex 3: Additional tables and figures

TABLE 37: OTHER MEASURES OF POVERTY, 2012/13-2018/19

	Sen Index			Sen-Shorrocks-Thon Index			Watts Index		
	2013	2019	Change	2013	2019	Change	2013	2019	Change
Urban	0.037	0.035	-0.002	0.028	0.026	-0.002	0.017	0.016	-0.001
Rural	0.152	0.116	-0.036	0.140	0.095	-0.044	0.097	0.063	-0.034
Lao PDR	0.127	0.095	-0.032	0.110	0.074	-0.036	0.074	0.048	-0.026

Source: Authors' calculation based on LECS5 and LECS6.

TABLE 38: ELASTICITY OF POVERTY WITH RESPECT TO CONSUMPTION, 2012/13-2018/19

	Poverty Headcount Rate			Poverty Gap			Squared Poverty Gap		
	2013	2019	Change	2013	2019	Change	2013	2019	Change
Urban	-3.50	-3.17	0.33	-3.33	-3.26	0.07	-3.82	-3.52	0.30
Rural	-2.02	-2.58	-0.56	-2.68	-3.02	-0.34	-3.08	-3.43	-0.35
Lao PDR	-2.16	-2.66	-0.50	-2.73	-3.05	-0.32	-3.13	-3.44	-0.31

Source: Authors' calculation based on LECS5 and LECS6.

TABLE 39: ELASTICITY OF POVERTY WITH RESPECT TO THE INEQUALITY, 2012/13-2018/19

	Poverty Headcount Rate			Poverty Gap			Squared Poverty Gap		
	2013	2019	Change	2013	2019	Change	2013	2019	Change
Urban	5.59	6.84	1.25	7.36	8.09	0.73	8.38	8.76	0.38
Rural	1.19	2.67	1.48	3.05	4.39	1.34	4.33	5.71	1.37
Lao PDR	2.32	3.87	1.55	4.27	5.81	1.54	5.63	7.06	1.43

Source: Authors' calculation based on LECS5 and LECS6.

Note: The figures are elasticities of FGT poverty measures (P0, P1, P2) with respect to Gini inequality index. The change of Gini is done via the following transformation of the actual income structure: 1. shift all incomes by a fixed amount (lump-sum transfer); 2. Normalize incomes to bring the mean of the new distribution to the mean of the original distribution (tax on incomes).

TABLE 40: POVERTY BY HOUSEHOLD HEAD'S AGE, 2012/13-2018/19

Household head's age	Poverty Headcount Rate			Distribution of the Poor			Distribution of Population		
	2013	2019	Change	2013	2019	Change	2013	2019	Change
0-5		0.0			0.0			0.0	
15-19	40.3	18.6	-21.7	0.3	0.1	-0.2	0.2	0.1	-0.1
20-24	48.6	33.6	-15.1	2.5	2.4	-0.1	1.3	1.3	0.0
25-29	37.5	28.6	-8.9	6.5	6.9	0.4	4.3	4.4	0.1
30-34	35.3	20.9	-14.4	11.7	10.4	-1.3	8.2	9.1	0.9
35-39	25.9	18.1	-7.8	12.5	12.7	0.2	11.9	12.9	1.0
40-44	23.4	17.4	-5.9	12.9	13.1	0.3	13.6	13.8	0.2
45-49	23.4	18.6	-4.8	14.7	14.1	-0.6	15.5	13.9	-1.6
50-54	20.1	17.5	-2.6	12.1	11.2	-0.9	14.8	11.7	-3.1
55-59	20.7	16.6	-4.2	10.0	11.2	1.1	11.9	12.3	0.4
60-64	22.7	16.8	-5.9	7.4	7.5	0.1	8.1	8.2	0.1
65+	22.3	15.7	-6.7	9.3	10.4	1.2	10.2	12.2	2.0
Lao PDR	24.6	18.3	-6.3	100.0	100.0	0.0	100.0	100.0	0.0

Source: Authors' calculation based on LECS5 and LECS6.

TABLE 41: REGIONAL DECOMPOSITION OF POVERTY CHANGES BETWEEN 2012/13 AND 2018/19

	Absolute change	Percentage change
Change in poverty (P0)	-6.32	100.00
Total Intra-sectoral effect	-6.19	97.96
Population-shift effect	-0.31	4.94
Interaction effect	0.18	-2.90
Intra-sectoral effects:		
Vientiane Capital	0.31	-4.83
North	-3.15	49.88
Central	-0.71	11.16
South	-2.64	41.75

Source: Authors' calculation based on LECS5 and LECS6.

TABLE 42: URBAN-RURAL DECOMPOSITION OF POVERTY CHANGES BETWEEN 2012/13 AND 2018/19

	Absolute change	Percentage change
Change in poverty (P0)	-6.32	100.00
Total Intra-sectoral effect	-5.69	90.12
Population-shift effect	-0.87	13.83
Interaction effect	0.25	-3.95
Intra-sectoral effects:		
Urban	-0.26	4.16
Rural	-5.43	85.96

Source: Authors' calculation based on LECS5 and LECS6.

TABLE 43: QUANTILE RATIOS, 2012/13-2018/19

	Bottom Half of the Distribution		Upper Half of the Distribution		Interquartile Range	Tails
	p25/p10	p50/p25	p75/p50	p90/p75	p75/p25	p90/p10
Total						
2013	1.37	1.44	1.50	1.57	2.17	4.67
2019	1.36	1.49	1.57	1.57	2.33	4.96
Urban						
2013	1.35	1.45	1.52	1.54	2.19	4.55
2019	1.44	1.51	1.54	1.63	2.33	5.44
Rural						
2013	1.34	1.39	1.42	1.43	1.98	3.79
2019	1.34	1.42	1.47	1.49	2.09	4.17

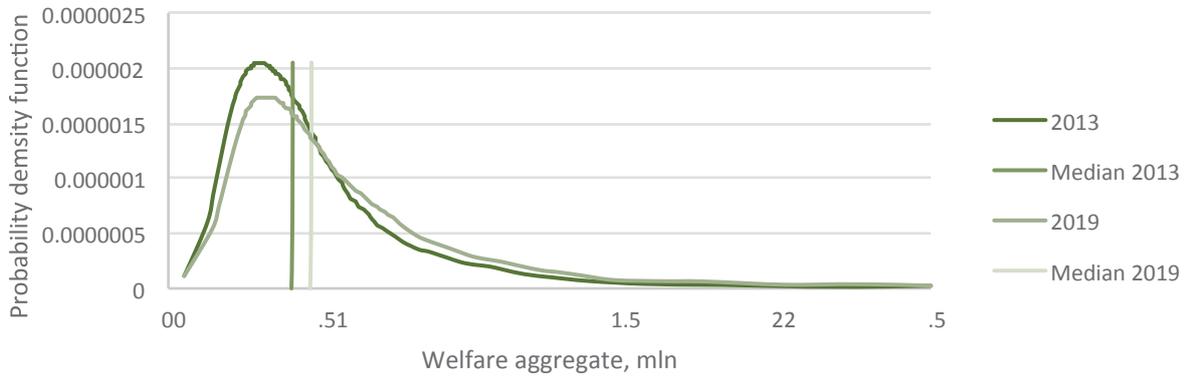
Source: Authors' calculation based on LECS5 and LECS6.

TABLE 44: THEIL INDEX AND ABSOLUTE DECOMPOSITION OF INEQUALITY, 2012/13-2018/19

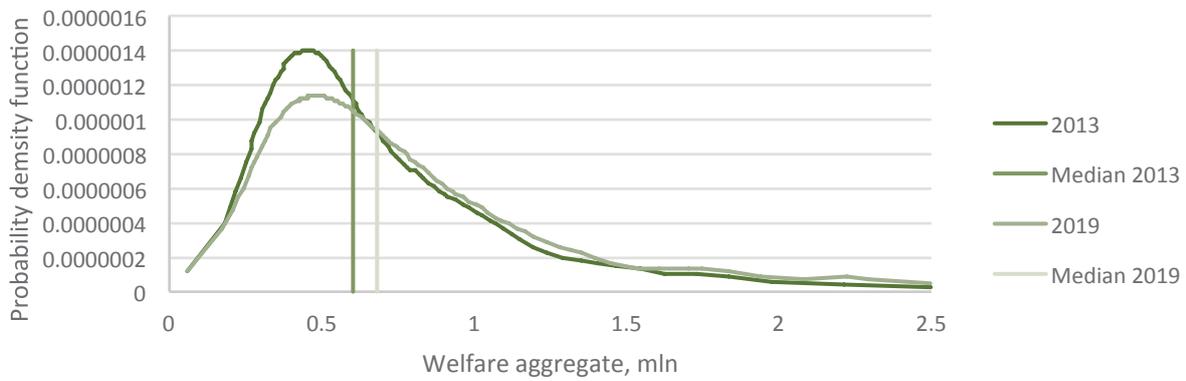
	2013	2019
Lao PDR	24.2	29.5
Urban		
Vientiane Capital	16.2	27.2
North	14.2	27.2
Central	16.9	21.2
South	22.8	16.5
Rural		
Vientiane Capital	19.7	23.3
North	17.0	39.9
Central	22.1	24.6
South	19.1	21.2
Between urban/rural inequality	3.9	3.7
Within-rural, within-region inequality	8.3	12.7
Within-rural, between-region inequality	0.7	0.6
Within-urban, within-region inequality	10.2	12.2
Within-urban, between-region inequality	0.5	0.4

Source: Authors' calculation based on LECS5 and LECS6.

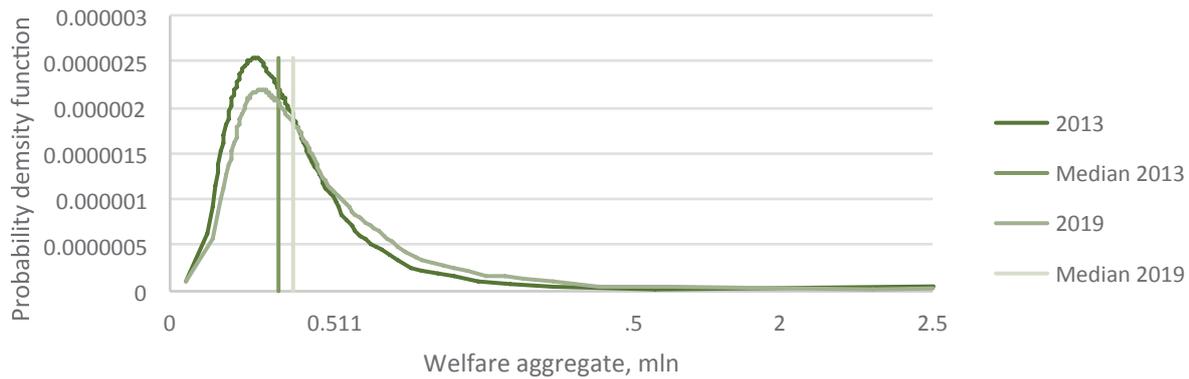
FIGURE 18: PER CAPITA CONSUMPTION PROBABILITY DENSITY FUNCTION, 2012/13-2018/19
Lao PDR



Urban



Rural



Source: Authors' calculation based on LECS5 and LECS6.

TABLE 45: COMPOSITION OF TOTAL CONSUMPTION, 2012/13–2018/19

Expenditure item	2013	2019	
		30-day diary	14-day diary
Total food consumption	60.3	62.9	62.9
Market food expenditure	25.5	31.4	32.7
Own consumption	33.5	30.3	28.4
Total non-food total consumption	39.7	37.1	37
Clothes and footwear	1.7	1.2	1.3
Utilities and fuel	4.9	4.3	3.7
Household sundries	1.8	1.6	1.8
Medical care	1.6	1.1	1.1
Transport and communication	8.9	7.5	7.4
Education	4.5	4.5	4.7
Personal care items	0.8	0.7	0.8
Recreation and culture	1.1	1.2	1.3
Alcohol and tobacco	3.1	2.5	2.6
Housing rent	10.8	12.0	11.9
Miscellaneous	0.4	0.4	0.5

Source: Authors' calculation based on LECS5 and LECS6.

Note: Education is imputed from the education module and housing rent is imputed rent.

TABLE 46: HOUSEHOLD HEAD'S LEVEL OF EDUCATION BY ETHNICITY AND ECONOMIC ACTIVITY, 2018/19

Household head's characteristic	Less than primary	Completed primary	Completed lower secondary	Completed upper secondary	Completed vocational training	University degree
Ethnicity						
Lao-Tai	30.9	41.8	13.6	4.4	3.8	5.6
Mon-Khmer	61.3	31.0	4.1	1.4	1.3	0.8
Chine-Tibet	68.5	23.9	2.6	1.4	1.8	1.8
Hmong-lumien	52.1	33.3	8.8	3.3	0.5	2.1
Main employment status in past 7 days						
Paid worker	5.7	19.7	22.5	17.0	10.5	24.6
Nonfarm self-employed	23.4	49.2	19.5	3.4	2.1	2.4
Farm self-employed	49.3	42.5	6.2	0.9	0.9	0.2
Unemployed and economically inactive	51.8	33.0	8.1	1.9	3.0	2.2

Source: Authors' calculation based on LECS5 and LECS6.

Note: Distribution of education attainment within each group.

TABLE 47: NET ENROLLMENT RATE BY GENDER, 2012/13–2018/19

	Age: 6-10						Age: 11-14					
	2012/13			2018/19			2012/13			2018/19		
	Boy	Girl	All	Boy	Girl	All	Boy	Girl	All	Boy	Girl	All
Lao PDR	76.5	76.7	76.6	82.9	83.9	83.4	36.4	40.5	38.4	58.2	59.1	58.6
Vientiane C.	85.9	87.2	86.5	96.3	97.3	96.8	61.4	75.1	68.1	85.4	79.0	82.3
North	76.7	77.3	77.0	96.3	97.3	85.7	37.0	35.3	36.2	85.4	79.0	61.5
Phongsaly	70.7	63.8	67.3	74.5	84.1	79.1	21.9	25.0	23.5	54.1	52.0	52.9
Luangnamtha	70.4	59.6	65.0	84.5	81.3	83.0	26.9	24.3	25.3	63.0	51.0	56.8
Oudomxay	71.3	72.2	71.7	82.9	76.0	79.2	39.8	30.8	35.1	41.1	44.0	42.7
Bokeo	76.4	85.2	80.7	81.4	82.1	81.7	35.0	39.3	37.0	49.9	46.4	48.2
Luangprabang	84.5	84.2	84.3	88.8	88.8	88.8	42.4	36.0	39.4	69.6	77.6	73.4
Huaphanh	72.4	76.1	74.4	90.6	88.7	89.7	33.9	31.6	32.7	66.9	68.8	67.7
Xayabury	86.2	90.5	88.7	92.7	93.7	93.2	44.1	55.5	50.0	74.3	77.2	75.5
Central	76.6	77.8	77.2	83.4	86.4	84.9	35.4	45.1	40.0	56.1	58.2	57.2
Xiengkhuang	81.7	87.3	84.3	92.7	93.7	90.8	34.6	50.5	42.2	74.3	77.2	67.5
Vientiane	86.4	91.9	88.9	92.9	88.6	95.1	43.1	57.4	50.2	66.6	68.2	81.7
Borikhamxay	83.6	90.1	86.7	92.6	97.3	94.8	48.0	53.3	50.7	79.6	83.1	72.5
Khammuane	82.0	78.1	80.3	93.7	95.9	84.5	34.2	34.0	34.1	68.6	76.7	49.2
Savannakhet	65.9	66.7	66.3	82.4	86.6	76.3	28.8	38.5	33.3	40.9	61.1	41.1
Xaysomboun				93.8	86.0	90.1				78.1	70.0	74.7
South	73.2	70.7	72.0	72.1	71.3	71.7	28.2	29.4	28.8	41.4	47.0	44.2
Saravane	65.1	63.6	64.4	68.5	65.5	67.1	27.9	29.3	28.6	34.3	41.8	37.7
Sekong	73.1	82.4	77.6	69.1	60.1	64.7	12.1	20.0	16.1	37.8	32.3	35.5
Champasack	77.6	71.6	74.9	79.7	82.5	81.0	30.5	32.7	31.7	49.0	55.1	52.2
Attapeu	70.3	69.8	70.1	54.2	58.5	56.1	35.4	23.9	29.6	37.6	38.5	38.0

Source: Authors' calculation based on LECS5 and LECS6.

Note: Net enrollment rate is the number of boys and girls of the age of a particular level of education that are enrolled in that level of education, expressed as a percentage of the total population in that age group.

TABLE 48: FOOD POVERTY BY URBAN-RURAL AND PROVINCE, 2018/2019

	National	Urban	Rural
Lao PDR	23.0	14.8	27.0
Vientiane Capital	18.8	16.6	27.1
Phongsaly	16.3	5.0	18.6
Luangnamtha	14.3	12.6	15.1
Oudomxay	31.5	23.0	34.6
Bokeo	21.6	6.1	28.2
Luangprabang	21.3	5.1	28.2
Huaphanh	27.4	3.9	31.1
Xayabury	23.5	11.0	31.4
Xiengkhuang	39.5	30.9	43.2
Vientiane	9.9	15.4	8.0
Borikhamxay	33.7	28.0	37.4
Khammuane	22.4	5.5	26.5
Savannakhet	26.7	12.9	30.0
Saravane	22.2	6.5	24.2
Sekong	35.7	22.8	42.1
Champasack	16.8	11.0	18.7
Attapeu	30.3	16.5	38.9
Xaysomboun	22.8	16.6	25.5

TABLE 49: POOR HOUSEHOLDS BY URBAN-RURAL AND PROVINCE, 2018/2019

	National		Urban		Rural	
	Total number	Percent	Total number	Percent	Total number	Percent
Lao PDR	171,867	13.5	21,427	4.9	150,440	18.0
Vientiane Capital	5,835	3.2	4,477	3.1	1,357	3.4
Phongsaly	1,917	5.3	123	1.8	1,793	6.1
Luangnamtha	2,574	7.0	356	3.0	2,217	9.0
Oudomxay	15,191	25.2	1,571	9.4	13,620	31.3
Bokeo	5,392	14.0	195	1.6	5,196	19.8
Luangprabang	12,856	15.0	207	0.8	12,649	21.7
Huaphanh	9,891	19.7	116	1.5	9,775	23.1
Xayabury	12,907	16.1	1,569	4.6	11,338	24.8
Xiengkhuang	8,996	19.4	1,496	10.2	7,500	23.6
Vientiane	3,128	3.6	951	4.2	2,178	3.3
Borikhamxay	9,360	17.0	2,461	11.0	6,899	21.0
Khammuane	15,571	18.5	666	3.6	14,904	22.8
Savannakhet	36,148	21.7	2,901	8.3	33,247	25.2
Saravane	12,984	18.9	912	12.9	12,072	19.6
Sekong	4,290	20.9	667	8.9	3,623	27.8
Champasack	8,936	6.7	1,461	4.5	7,475	7.3
Attapeu	4,758	20.3	1,194	12.1	3,564	26.3
Xaysomboun	1,135	6.9	103	1.9	1,032	9.3

TABLE 50: HOUSEHOLD ACCESS TO IMPROVED WATER, SANITATION FACILITIES AND ELECTRICITY BY POVERTY STATUS AND PROVINCE, 2018/2019

	Poor				Non-poor			
	Gas and electricity for cooking	Improved sanitation facilities	Safe water	Electricity for lighting	Gas and electricity for cooking	Improved sanitation facilities	Safe water	Electricity for lighting
Vientiane Capital	8.3	94.6	100.0	100.0	34.9	99.7	100.0	99.7
Phongsaly	0.0	29.7	100.0	42.3	6.0	67.7	97.7	77.9
Luangnamtha	4.5	71.6	98.5	70.4	13.6	90.2	96.9	90.9
Oudomxay	4.1	51.9	86.0	63.9	12.1	81.5	90.4	79.5
Bokeo	0.0	75.5	78.7	92.2	11.6	97.6	91.9	100.0
Luangprabang	3.4	44.3	91.0	67.1	10.2	80.8	95.9	87.8
Huaphanh	14.7	62.1	100.0	63.8	10.2	93.8	99.7	91.0
Xayabury	0.0	92.9	100.0	96.8	2.1	98.8	97.8	99.6
Xiengkhuang	2.1	74.8	98.1	77.0	12.8	93.3	96.8	96.9
Vientiane	3.8	44.2	95.3	96.7	8.9	98.8	99.6	99.0
Borikhamxay	0.0	100.0	100.0	100.0	6.2	99.4	98.6	99.7
Khammuane	10.7	42.0	79.0	91.9	15.1	80.1	95.0	98.1
Savannakhet	4.5	28.1	51.4	67.3	12.5	69.3	81.7	93.2
Saravane	6.1	22.3	82.8	80.0	5.5	64.7	83.9	96.0
Sekong	0.9	37.7	81.7	58.6	1.2	73.9	95.8	75.2
Champasack	0.0	65.1	92.4	97.3	2.9	85.9	96.0	99.4
Attapeu	7.5	35.5	87.0	85.4	13.7	70.2	87.2	93.8
Xaysomboun	0.0	81.8	93.9	100.0	6.8	95.9	98.4	99.7

TABLE 51: MULTIDIMENSIONAL POVERTY HEADCOUNT RATE (PERCENT) BY PROVINCE, 2012/2013 –2018/2019

	2012/13	2018/19
Lao PDR	33.1	22
Vientiane Capital	2.5	5.2
Phongsaly	51.7	23.9
Luangnamtha	44.6	15.3
Oudomxay	50.0	34.8
Bokeo	56.8	23.7
Luangprabang	39.3	23.4
Huaphanh	54.0	28.0
Xayabury	20.5	22.2
Xiengkhuang	42.1	27.5
Vientiane	15.0	5.7
Borikhamxay	17.6	21.5
Khammuane	34.8	28.0
Savannakhet	38.9	33.9
Saravane	62.2	32.9
Sekong	61.4	44.1
Champasack	28.0	11.3
Attapeu	21.3	35.1
Xaysomboun		11.0

TABLE 52: PERCENTAGE OF THE MULTIDimensionally POOR AT DIFFERENT LEVELS OF DEPRIVATION BY PROVINCE, 2012/13-2018/19

	2012/13				2018/19			
	Mild (0.33-0.44)	Moderate (0.45-0.59)	Severe (0.60-0.79)	Very severe (0.80-1)	Mild (0.33-0.44)	Moderate (0.45-0.59)	Severe (0.60-0.79)	Very severe (0.80-1)
Vientiane Capital	45.99	54.01	0.00	0.00	88.2	11.8	0.0	0.0
Phongsaly	33.64	16.09	36.29	13.98	46.6	27.1	25.2	1.1
Luangnamtha	22.32	37.86	21.79	18.03	25.7	51.1	16.1	7.2
Oudomxay	19.53	16.15	39.90	24.42	27.0	34.9	29.9	8.3
Bokeo	8.99	29.99	38.47	22.56	26.9	29.4	30.0	13.7
Luangprabang	25.72	29.27	36.70	8.31	41.7	35.9	20.9	1.5
Huaphanh	19.31	31.89	42.41	6.40	23.0	42.9	29.4	4.8
Xayabury	40.07	25.53	30.17	4.23	60.0	26.0	13.9	0.0
Xiengkhuang	17.62	27.41	52.70	2.27	36.3	41.3	21.4	1.0
Vientiane	32.67	37.22	30.11	0.00	33.5	52.6	13.8	0.0
Borikhamxay	37.88	39.20	21.30	1.63	64.3	34.3	1.4	0.0
Khammuane	30.41	26.75	35.98	6.85	49.7	28.7	12.7	8.9
Savannakhet	22.37	23.46	33.71	20.46	23.5	32.3	35.1	9.1
Saravane	14.75	19.40	41.05	24.80	31.5	29.4	25.4	13.8
Sekong	20.20	28.14	42.62	9.04	25.9	39.6	20.1	14.5
Champasack	23.65	30.15	38.75	7.45	41.0	41.2	16.0	1.8
Attapeu	45.87	23.04	27.31	3.78	26.9	38.7	23.9	10.5
Xaysomboun					44.3	44.4	11.2	0.0

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