RESEARCH REPORT

MULTIDIMENSIONAL INEQUALITY IN VIETNAM

PREPARED BY:

MDRI Mekong Development Research Institute
Power of Knowledge

UPON REQUEST FROM:

OXFAM

FUNDED BY:

AFD AGENCE FRANÇAISE DE DÉVELOPPEMENT

Funded by the Development Cooperation Instrument of the European Union

MDRI Mekong Development Research Institute
Power of Knowledge

RESEARCH REPORT

MULTIDIMENSIONAL INEQUALITY IN VIETNAM

This document has been prepared with the financial assistance of the European Union. The opinions expressed herein must in no way be considered to reflect the official position of the European Union or the AFD.

Hanoi, May 2020

TABLE OF CONTENTS

LIST OF FIGURES, TABLES, AND BOXES ii
ABBREVIATIONS iii
ACKNOWLEDGEMENTS iv
EXECUTIVE SUMMARY 12
Background 13
Objective of the report 13
Methodology 13
Key Findings 14
Conclusion & Recommendations 17

CHAPTER 1: INTRODUCTION 19
1.1. Background 20
1.2. Framework and research objectives 22
1.3. Structure of the report 23

CHAPTER 2: METHODOLOGY 24
2.1. Quantitative research method 25
2.2. Qualitative research method 25
2.2.1. Locations for the qualitative research 25
2.2.2. Qualitative research toolkit 31

CHAPTER 3: OVERVIEW OF INEQUALITY STUDIES IN VIETNAM 33
3.1. Literature review 34
3.2. Monetary and asset inequality in Vietnam 38
3.2.1. Trends in inequality 38
3.2.2. Inequality between the Kinh and ethnic minorities 41
3.2.3. Decomposition of inequality by population subgroup 44
3.2.4. Decomposition of inequality by source of living standard indicator 46

CHAPTER 4: INEQUALITIES IN LIFE AND HEALTH 49

4.1. Health status and treatment 50

4.2. Life expectancy and mortality rates 69

4.3. Healthy life 74

4.4. Drivers of inequalities in health 84

CHAPTER 5: INEQUALITY IN EDUCATION AND LEARNING 87

5.1. Basic skills 88

5.2. Educational attainment 95

5.3. Access to information and technology necessary to participate in society 108

5.4. Analysis of the drivers of inequalities in education and learning 110

CHAPTER 6: INEQUALITY IN PARTICIPATION, INFLUENCE AND VOICE 116

6.1. Political participation and political activity 117

6.2. Perceived influence 125

6.3. Analysis of the drivers of inequalities in participation 131

CHAPTER 7: CONCLUSION AND RECOMMENDATIONS 134

7.1. Conclusions 135

7.2. Recommendations 136

REFERENCES 139

APPENDIX 145

Appendix 1: Monetary Inequality 146

Appendix 2: Additional Tables 147

Appendix 3: Qualitative Tools 158

LIST OF FIGURES, TABLES, AND BOXES

Figures

Figure 2.1. Map of the qualitative research area 27

Figure 2.2. Hung Loi Commune's Primary School - Tau Lin satellite school site 28

Figure 2.3. Quang Hiep Commune's healthcare centre 29

Figure 2.4. An Hiep Kindergarten in An Hiep Commune 30

Figure 3.1. Gini indexes over time 39

Figure 3.2. Lorenz curves of per capita income and expenditure over time 39

Figure 3.3. Lorenz curve of different living standard indicators 40

Figure 3.4. Per capita expenditure of the Kinh and ethnic minorities 41

Figure 3.5. Expenditure poverty rate of the Kinh and ethnic minorities 42

Figure 3.6. Poverty rate of the Kinh and ethnic minorities by district 42

Figure 3.7. 90% confidence interval for the rural poverty rate of ethnic groups, 2016 43

Figure 3.8. Decomposition of expenditure inequality by urban/rural area and province (in percent) 44

Figure 3.9. Decomposition of expenditure inequality by ethnic group (in percent) 45

Figure 3.10. Decomposition of expenditure inequality by household head characteristic, 2016 (%) 45

Figure 3.11. Contribution of income sources to income Gini (in percent) 46

Figure 3.12. Elasticity of Gini to income sources (in percent) 47

Figure 3.13. Contribution of expenditure items to expenditure Gini (in percent) 47

Figure 3.14. Elasticity of Gini to expenditure items (in percent) 48

Figure 4.1. Number of sick days in the last 12 months by ethnic group, 2016 (days) 53

Figure 4.2. Number of sick days in the last 12 months by expenditure quintile (days) 53

Figure 4.3. Prevalence of people with disabilities (%) 54

Figure 4.4. Proportion of people with health insurance by ethnic group (%) 58

Figure 4.5. Proportion of people with health insurance by expenditure quintile (%) 58

Figure 4.6. Number of annual healthcare visits by expenditure quintile in 2016 62

Figure 4.7. Number of annual healthcare visits in province-level and central-level hospitals by ethnic groups in 2016 62

Figure 4.8. Number of annual healthcare visits in province-level and central-level hospitals by expenditure quintile in 2016 64
Figure 4.9. Distance from the village to the nearest hospital in 2016 (km) 65
Figure 4.10. Annual out-of-pocket expenditure on healthcare (thousand VND), 2016 66
Figure 4.11. Health conditions of children under 5 (%) 80
Figure 4.12. Proportion of households with tobacco consumption 83
Figure 4.13. Proportion of households with tobacco consumption by education of household head and expenditure quintile in 2016 (%) 83
Figure 4.14. Share of tobacco expenditure in total household expenditure in 2016 (%) 84
Figure 5.1. Proportion of children below 5 with purchased toys, 2016 88
Figure 5.2. Number of comic books per child (children below 18) (2016) 89
Figure 5.3. Math and literature score of grade-5 students by ethnic group (2016) 92
Figure 5.4. Math and literature score of grade-5 students by mother's education (2016) 92
Figure 5.5. School enrolment by ethnic group, 2016 (%) 95
Figure 5.6. Proportion of people aged 18-22 attending college, 2016 (%) 96
Figure 5.7. Average tuition fees, 2016 104
Figure 6.1. Proportion of individuals voting in the recent election by gender, ethnic group, and education (%) 118
Figure 6.2. Proportion of individuals voting in the recent election by wealth quintile and urban/rural area (%) 118
Figure 6.3. Proportion of people who can correctly name the Prime Minister, 2018 (%) 119
Figure 6.4. Proportion of people contacting local government in the last year, 2018 (%) 122
Figure 6.5. Proportion of people submitting a proposal to the People's Committee during the past year, 2018 (%) 128

Tables

Table 1.1. Inequality domains 22
Table 2.1. Number of KIIs in the qualitative research 32
Table 2.2. Number of FGDs in the qualitative research 32
Table 3.1. Living standards over time 38
Table 3.2. Inequality measures of per capita expenditure 40
Table 4.1. Proportion of sick people in the past 12 months by demographic and regional characteristics (%) 50
Table 4.2. Proportion of sick people in the past 12 months by social-economic characteristics (%) 52
Table 4.3. Proportion of people with disabilities by demographic and regional characteristics (%) 56

Table 4.4.	Proportion of people with disabilities by social-economic characteristics (%)	57
Table 4.5.	Proportion of people with health insurance by expenditure quintile (%)	60
Table 4.6.	Catastrophic health expenditure 2016	67
Table 4.7.	Infant and under-5 mortality rates (‰)	69
Table 4.8.	Live birth and life expectancy	71
Table 4.9.	Mortality rate by demographic and regional variables (‰)	72
Table 4.10.	Mortality rate by socio-economic characteristics (‰)	74
Table 4.11.	Access to clean water and improved sanitation facilities by demographic and regional characteristics, 2016	75
Table 4.12.	Access to clean water and improved sanitation facilities by demographic characteristics and expenditure group, 2016	78
Table 4.13.	Poverty rate (%)	79
Table 4.14.	Health conditions of children under 5, by demographic characteristics (%)	81
Table 5.1.	Percentage of children aged 36-59 months who are developmentally on track - literacy-numeracy, physical development, social-emotional development, and learning and Early childhood development Index (2014)	90
Table 5.2.	Math and literature score of grade-5 students by socio-economic characteristics (2016)	93
Table 5.3.	School enrolment rate by demographic and socio-economic characteristics, 2016	97
Table 5.4.	Educational attainment by demographic and geographic characteristics, 2016	100
Table 5.5.	Educational attainment by socio-economic characteristics, 2016	101
Table 5.6.	Spending on the education of students by demographic and geographic characteristics	102
Table 5.7.	Spending on the education of students by socio-economic characteristics	103
Table 5.8.	Spending on other training activities by demographic and geographic characteristics	106
Table 5.9.	Spending on other training activities by socio-economic characteristics	107
Table 5.10.	Proportion of people living in a household with a telephone by demographic characteristics (%)	108
Table 5.11.	Proportion of people living in a household with a telephone by socio-economic characteristics (%)	109
Table 5.12.	Number of vocational training institutions in Vietnam by region (as of 31/12/2018)	115
Table 6.1.	Proportion of people knowing the names of the Prime Minister, the Secretary of the Communist Party, and the Chairman of the National Assembly, 2018 (%)	120
Table 6.2.	Proportion of people contacting local government in the last year (%)	123
Table 6.3.	Proportion of people satisfied with different public services during the past year, 2018 (%)	124

Table 6.4. Proportion of people attending meetings held by the People's Council by demographic and geographic characteristic, 2018 (%) 126

Table 6.5. Security, 2013-2018 (%) 130

Boxes

Box 4.1. People with disabilities in poor households have limited access to healthcare and education opportunities 55

Box 4.2. Health insurance partially shares the health expenditure burden with the poor 59

Box 4.3. Health insurance cards are used in case of a serious illness and/or high costs 61

Box 4.4. The poor and ethnic minorities rarely visit healthcare centres annually 63

Box 4.5. The H'Mong spend less on health than others 66

Box 4.6. Unhygienic conditions, unsafe water, and the mortality of children aged 1-5 70

Box 4.7. The Tay, Nung, and H'Mong have the highest mortality rates 73

Box 4.8. Access to clean water and sanitation still needs improvement 77

Box 4.9. Lack of proper maintenance in the waterworks and unhealthy sanitation habits 86

Box 5.1. The math and literature scores of H'Mong and Khmer grade-5 students are the lowest among all ethnic groups 94

Box 5.2. The enrolment rate in kindergarten among Khmer children is very low, at less than 50% 96

Box 5.3. The enrolment rate in high school and at higher levels starts to drop 98

Box 5.4. Because of poverty, many households cannot afford to have all children continue their education 99

Box 5.5. There is a significant difference in the spending on the education of students between urban and rural areas 105

Box 5.6. The access to mobile phones and the Internet is increasingly growing 110

Box 5.7. The perceptions of certain ethnic groups has a negative impact on children's access to education and learning 113

Box 6.1. The poor and EM groups are less likely to voice their opinions 127

Box 6.2. Integrating propaganda and the implementation of state policies into religious activities in Soc Trang 129

ABBREVIATIONS

CMR	*Crude Mortality Rate*
CIEM	*Central Institute for Economic Management*
CISDOMA	*Consultative Institute for Socio-Economic Development of Rural and Mountainous Areas*
ECDI	*Early Childhood Education Index*
EM	*Ethnic Minorities*
FGD	*Focus Group Discussion*
GSO	*General Statistics Office (of Vietnam)*
HSPI	*Health Strategy and Policy Institute*
IMR	*Infant Mortality Rate*
IRD	*French Institute for Development Research in Hanoi*
KII	*Key Informant Interview*
LSE	*London School of Economics*
MICS	*Multi Indicator Cluster Survey*
MIF	*Multidimensional Inequality Framework*
MOH	*Ministry of Health*
MOHA	*Ministry of Home Affairs*
MOLISA	*Ministry of Labour, War invalids and Social Affairs*
MPI	*Ministry of Planning and Investment*
PAPI	*Vietnam Governance and Public Administration Performance Index survey*
PPP	*Power Purchasing Parity*
SDG	*Sustainable Development Goal*
U5MR	*Under-five mortality rate*
UNDP	*United Nations Development Programme*
VHLSS	*Vietnam Household Living Standard Survey*
VNEN	*Vietnam Escuela Nueva Project*
VNIES	*Vietnam National Institute of Educational Sciences*
VNU	*Vietnam National University*
WB	*World Bank*

ACKNOWLEDGEMENTS

This publication was produced by a researcher team from Mekong Development Research Institute (MDRI) with the financial support of the European Union and the cooperation of Oxfam Vietnam. Its contents are the sole responsibility of MDRI and do not necessarily reflect the views of the European Union or the Agence Francaise de Developpment (AFD).

The MDRI research team included Mr. Phung Duc Tung (MDRI's director - the Leader) and researchers: Mr. Nguyen Viet Cuong, Ms. Dang Huyen Trang, Ms. Tran Hien Giang, Ms. Nguyen Thi Thu Oanh and Ms. Pham Thi Ha. During the study process, Oxfam Vietnam had supervised and cooperated closely with the research team to ensure the fieldwork quality of the research.

The research report was contributed by experts from Oxfam Intemón and Oxfam Vietnam including: Ms. Cristina Rovira Izquierdo, Mr. Àlex Prats, Ms. Vu Thi Quynnh Hoa, Mr. Nguyen Quang Thai, Mr. Vu Xuan Viet. The MDRI research team is grateful to the leaders of the Tuyen Quang, Dak Lak, and Soc Trang provinces for their strong support during the field work. We also appreciate the participation in the qualitative research of the leaders and 60 residents, primary school principals, representatives of Farmers' Unions, the Fatherland Front, the Women's Union, village leaders from three communes, namely Hung Loi (Yen Son district, Tuyen Quang province), Quang Hiep (Cu M'gar district, Dak Lak province), and An Hiep (Chau Thanh district, Soc Trang province).

Last but not least, this report would not have been complete without the valuable feedback and contributions of experts from the Oxfam Task Team, AFD Paris, Central Institute for Economic Management (CIEM), Consultative Institute for Socio-Economic Development of Rural and Mountainous Areas (CISDOMA), Health Strategy and Policy Institute (HSPI), French Institute for Development Research in Hanoi (IRD), Ministry of Labour, War invalids and Social Affairs (MOLISA), Ministry of Health (MOH), Ministry of Home Affairs (MOHA), Ministry of Planning and Investment (MPI), United Nations Development Programme Vietnam (UNDP), Vietnam National Institute of Educational Sciences (VNIES), Vietnam National University (VNU), and World Bank (WB).

The research team specially thank the leaders of Oxfam Vietnam and Mr. Felipe Korreales, lead project officer on behalf of AFD for their important comments on the final draft version of the report. We also thank Ms. Hélène Windish and Ms. Cristina Rovira Izquierdo for their editing.

EXECUTIVE SUMMARY

Our study is the first attempt to examine multidimensional inequality in Vietnam over time

BACKGROUND

There is a broad consensus that inequality is harmful to sustainable development. Recent studies show that inequality can reduce economic growth and increase poverty, hamper the enjoyment of human rights, and people's well-being. Understanding the trends and drivers of inequality is, therefore, essential not only for researchers, but also for policymakers.

Vietnam has achieved great social and economic development over the past 30 years. However, there has been growing concern over inequality in Vietnam, in particular that of opportunities and voice between population subgroups. Even though Vietnam has achieved relatively broad-based economic growth, notorious gaps remain not only in income, but also in other critical dimensions of well-being and influence between population subgroups. Nonetheless, research efforts have focused on understanding monetary inequality in Vietnam, and no study has comprehensively examined inequalities from a multidimensional perspective.

OBJECTIVE OF THE REPORT

Our study is the first attempt to examine multidimensional inequality in Vietnam over time. In addition to income and asset inequality, we analyse inequality in 3 domains including life and health, education and learning, and participation, influence, and voice. Each domain is examined according to different indicators suggested in the Multidimensional Inequality Framework (MIF) by the London School of Economics (LSE) and Oxfam. Due to data unavailability, the research team was not able to measure all the indicators suggested. For each domain, we report a selected number of indicators based on the data available for analysis.

METHODOLOGY

The research employs both quantitative and qualitative methods.

For the quantitative research method, the study uses several datasets to analyse multidimensional inequality. The two main datasets are the Vietnam Household Living Standard Surveys (VHLSS) and the Vietnam Governance and Public Administration Performance Index (PAPI) surveys. The VHLSSs are used to analyse income and asset inequality and two specific domains of the Multidimensional Inequality Framework, namely 'Life and health' and 'Education and learning.' The PAPI surveys are used to examine inequality in the 'Participation, influence and voice' domain.

For the qualitative research method, the research team used two main methods: Focus Group Discussions (FGD) and Key Informant Interviews (KII). To be specific, the researchers collected data on local human stories to shed light on the existence of inequality and identify its drivers. The topic of FGDs and KIIs focuses on understanding the status quo of inequalities in the access and quality of healthcare services, education, and community participation among population subgroups, including male/female, different ethnic groups, and groups of different economic status.

KEY FINDINGS

Income and asset inequality

There is a large gap in living standards between Kinh and ethnic minority (EM) groups. Kinh and Chinese (Hoa) people experience the lowest poverty rate, while the poverty rate of other ethnic groups remains remarkably high. Ethnic minorities, who made up only 15% of the country's population, constituted 73% of the poor in 2016. Among ethnic groups, as well as across geographic areas, there is also a striking difference in well-being which is growing. Inequality, as measured by household expenditures, between provinces/cities accounts for nearly 22% of total inequality, while inequality between ethnic groups makes up 15% of total inequality.

Inequality in wages accounts for the largest share, at 46.2%, in total income inequality in 2016. Inequality in household non-farm business income and other non-farm income accounts respectively for 30.1% and 13.2% of total income inequality, while farm income contributes very little to total income inequality.

The result shows that inequality in other non-food consumption and housing contributes the most to total consumption inequality. Non-rice food consumption also contributes greatly to total consumption inequality. Inequality in education and health expenditures, as well as rice consumption, accounts for a small proportion of total consumption inequality.

Inequality in life and health

People's health, as measured by the percentage of people getting sick and the number of times they have experienced illness, does not vary much among population groups. However, the proportion of people with disabilities does widely vary across education levels and expenditure groups. For example, **the non-degree group have the highest percentage of people with disabilities (25%), 7 times as high as that among individuals with a college degree or higher. The poorest quintile group (20% of the population with the lowest expenditure level) has a proportion of people with disabilities that is nearly 4 times as high as that of the richest quintile group.** The disability rate of ethnic minority groups is also much higher than that of the Kinh.

Vietnam has successfully provided free health insurance for the poor and ethnic minorities, bridging the gap between poor and rich people. However, access to health services remains uneven among population groups. **The average number of visits per year by ethnic group, especially at higher quality health facilities (that is, at provincial and central hospitals), remains very low**. The access to those facilities also remains very uneven between different socio-economic groups, the richest visiting quality health centres more often than the poorest. The major difference is related to perception, affordability, and factors related to the accessibility and physical location of hospitals. The Kinh often live close to health facilities, while the H'Mong, Dao, Thai, Muong, and Nung live further from health facilities.

The mortality rate of the Kinh is much lower than that of EM groups. For instance, the Tay, Nung, and H'Mong have the highest mortality rate, mostly due to illness and disease. This also reflects the poor quality of health and limited access to health services among these EM groups.

Currently, 1.8 million children under the age of five suffer from malnutrition in Vietnam, the majority belonging to EM groups and living in remote areas (Northern Mountains and Central Highlands). **The children of poorer households, of less-educated mothers, are more likely to be malnourished**

than those of richer households or highly educated mothers. Children in EM families and poor families also stand a higher chance of getting diarrhoea than those in other families.

Although the mortality rates for children under 1 year old (IMR) and under 5 years old (U5MR) in Vietnam have much improved, there is a big difference between regions. Particularly, in both the Northern Midlands and Mountains and Central Highlands, which are two regions with the highest IMR and U5MR in the country, the rate is nearly 3 times as high as that of the Southeast region.

Concerning the impact of living conditions on the reported health status, **the lack of access to clean water and improved latrines remains a major challenge for households in Vietnam, especially in rural and remote areas**. The latrine and water conditions of the EM groups are also much worse than those of the Kinh. Specifically, the percentage of Kinh households with a flush toilet is 3 times higher than that of EM groups. For improved sanitation facilities (including a flush toilet), the access rate of EM households has generally improved, but there are differences among these groups. About half of Kinh households have piped water, while only about 13% of EM households have access to it. In terms of safe water (including piped water), both Kinh and EM groups, in general, have relatively high access rates. However, the percentage of H'Mong and Dao households that have access to clean water is significantly lower than that of other EM groups.

Finally, **annual out-of-pocket (OPP) health spending varies remarkably across ethnic groups and living standards**. The health expenditures of the Kinh are more than 15 times higher than those of the H'Mong. A large gap also exists between the rich and the poor. However, there is a positive signal that the out-of-pocket payment of the poorest group is relatively low due to the support of the free health insurance policy. On the other hand, the near-poor face some risks of high out-of-pocket payment in comparison to other groups when their health insurance coverage is the second lowest among the 5 quintile groups. **The education of the household head is associated with catastrophic health expenditures:** the higher the level of education the household head achieves, the less the household will incur such health expenditures.

Inequality in life and health is often related to demographic characteristics. Four main drivers can be identified: (i) unequal access to quality healthcare; (ii) unequal access to maternal and child healthcare; (iii) unequal access to clean water, adequate sanitation, and good nutrition; and (iv) negative social and cultural norms that could lead to health risks.

Inequality in education and learning

Although Vietnam has achieved education universalization at primary school, **access to early education, lower secondary school, and higher education widely varies across ethnic groups, as well as across households with different economic conditions.** Children in rich households are better cared for in terms of learning and entertainment, as shown by a higher percentage of children below 5 with purchased toys and a higher number of comic books per child.

The proportion of people aged 18-22 attending college is quite different from one ethnic group to the other. The Kinh have the highest rate, with approximately 46% of the population aged 18-22 attending college; meanwhile, people from the Khmer, H'Mong, and Dao groups have the lowest enrolment rate, less than 10%. The enrolment rate in college is also highly negatively correlated with households living in rural and mountainous areas, and economic conditions. Noticeably, at all levels, the female enrolment rate is higher than the male one, and the gap is likely to increase in higher levels of education and over time.

The experienced quality of education is also different between geographic areas and ethnic groups. EM children, children living in the Northern Mountains, and children of poor households have significantly lower academic performance than Kinh children, children in Delta areas, and children in rich households. **The investment in education, as measured by household spending on education, also widely varies across population subgroups.** The spending on education per Kinh student is approximately 4 times higher than that per student from an EM group. The qualitative study also shows the disparity in the quality of the learning environment, **in particular the quality of infrastructure, facilities, equipment, and teaching activity between the main site and the satellite site of the same school.**

Inequality in education and learning is often associated with differences in the family background such as ethnicity, income, and education level of the household head or mother. The six main drivers of inequality identified by this research are: (i) unequal access to high-quality education; (ii) harmful social and cultural norms that affect access to education and learning; (iii) the lack of provision for special educational needs; (iv) unequal access to early childhood development opportunities; (v) unequal access to career guidance, vocational and technical training, apprenticeships, and internships; and (vi) unequal access to books, technology, and the Internet.

Inequality in participation, influence, and voice

Compared to men, women have lower levels of engagement with political issues and lower voting turnout. The proportion of individuals who tend to participate in elections is proportional to the level of education. **The higher the education level is, the greater the proportion of people participating in elections.** High-income households and urban households also have a higher level of political knowledge and participate more in elections than low-income households and rural households.

Correctly naming the current Prime Minister could be taken as a proxy of people's awareness and active participation in political activities. In this sense, when asked about the current PM, there were significant differences in the degree of awareness between male/female groups, Kinh/EM groups, education levels, and income. The percentage of Kinh people who knew the Prime Minister's name in 2018 was 51.7%, while this respective rate for EM groups was only 33.7%. This rate among males is twice that of females, 70.4% versus 32%. In addition, the group with higher education (upper secondary school and above) has a higher rate of knowing the name of the Prime Minister (76%), three times that of the below-primary education group (22%). This confirms the importance of education in improving people's capacities and abilities to fully engage in political affairs, to be aware of public debates, and to participate in them. The high-income groups also appear to be more interested in politics than the low-income groups.

Commune and village meetings act as a bridge connecting people with local leaders at all levels. Participating in meetings with representatives of the public or local leaders helps people realise their role and influence, and at the same time, motivates people to actively contribute their ideas to local and national policy formulation. **The proportion of men attending these meetings is almost twice that of women.** While the poorest are more involved in meetings with People's Councils at the commune level, the richest are more involved in provincial meetings. The more educated and the higher income earners more actively participate in exchanges with the People's Councils.

The percentage of people submitting proposals to the People's Committees at all levels varies significantly between men and women. **The percentage of women proactively expressing opinions**

and submitting them to People's Committees at all levels is only half that of men. The general trend is that the more educated and the higher income earners are more likely to actively participate and voice personal opinions. A critical Gordian knot of compounding inequalities can be identified in the interaction between **inequality in participation, influence, and voice, which goes hand in hand with income inequality, education inequality, and gender inequality in society.** Inequality in participation could potentially perpetuate the cycle of inequality, as disadvantaged or vulnerable groups do not have enough opportunities to participate in the important decision-making process in their locality, leading to intergenerational inequality that could otherwise be avoided. **Besides, educational attainment differences not only directly affect the gap in career opportunities, leading to disparities in living standards, but also the opportunity to participate in important local decisions that directly impact people's lives.**

Inequality in participation, influence, and voice is driven by imbalances in power between individuals or by the misuse of power by organisations or the state. Four main categories of drivers can be identified: **(i) income and education inequalities are the root causes of inequality in participation; (ii) the prevalence of social and cultural norms that diminish women's empowerment; (iii) ineffectiveness in encouraging the democratic participation of all population groups; and (iv) inefficiency in enforcing laws that ensure transparency and prevent corruption.**

CONCLUSION & RECOMMENDATIONS

The research findings point at large gaps in the capability to enjoy the right to a proper, quality education, and to experience a life free of illness with access to quality healthcare between subpopulation groups across the spatial, socio-economic, and ethnic axes of inequalities. In this sense, people belonging to EM groups, women, and people living in rural provinces are more affected by inequalities in health and education than the Kinh, men, and higher-income households living in predominantly urban areas. The main factors that explain these observed gaps are unequal access to quality essential public services, including health, education, water, and infrastructures.

Furthermore, the inequality in the capability to participate, raise one's voice, and influence public matters is extremely acute between men and women and the poorest households, with a lower level of education, compared to the richest, urban, highly educated households. Here, we find a key sign of compounding inequalities that generate a potential spiral which reproduces the dynamics of disadvantage and exclusion along the gender, socio-economic, ethnic, and spatial axes of inequality. Since the education level, time, and material resources are very much related to the capability to influence public affairs, those belonging to an EM group, as well as the poorest, rural households with less access to quality education will be the least equipped with the critical ability to voice their needs and demands, and shift the terms of the public debate in their favour. Along these axes of inequalities, 50% of the population is structurally left behind on political matters, as unequal gender relations reinforce inequalities in the realm of public participation.

Based on the analysis, the study suggests a number of relevant policy recommendations to bridge the gap between population groups. **To reduce poverty and inequality, it is necessary to adopt a human-centred approach that focuses not only on growth, but also on the different aforementioned dimensions of well-being.** The government should implement appropriate policies to promote the private sector to attract the labour force from rural areas and from ethnic minorities, and at the same time, policies to increase agricultural productivity, as well as to find markets for the output. Besides, **income redistribution policies and pro-poor policies** are also of great importance.

In addition to economic development policies, the government should also implement policies to promote **healthcare and education in disadvantaged areas**, in particular areas mostly populated by ethnic minorities. There should be policies to cover the travel expenses of caregivers who accompany patients to visit provincial or central hospitals. Improving the access to safe drinking water greatly contributes to improving people's health. The **quality of teaching and education in disadvantaged areas** should also be given priority and receive adequate investment. Vocational training to meet the labour market demand also improves professional skills and job opportunities for disadvantaged groups.

Policies aimed at raising the awareness of healthcare among the poor and ethnic minorities are important, given that the cultural practices and perceptions of certain EM groups have a negative impact on their health status. Propaganda policies emphasizing people's participation in political activities and ability to raise their own voices need to be promoted.

Critical thinking, active-citizenship education, and awareness-raising programmes will be critical to support and strengthen the abilities of women, the poorest households, and less educated people to be equipped with key critical tools and to become fully aware of the potential of public participation and voice raising. These programmes should encourage an active participation in the local democratic process, as well as other social activities at the local and community level. The contribution to and participation in important local decisions hugely rely on 'learning by doing,' but also on emulation movements and role modelling, especially through the transparency and advocacy practices of local government representatives in villages. In this sense, there should be programmes in accordance with local democratic regulations promoting good practices and spaces for structured participation, idea contribution, mechanisms of opinion, and complaint receiving and responding.

To effectively address growing multiple inequalities, it is necessary to understand them, to better measure them, to better comprehend their causes and determinants, to find the best action levers to counter them in all areas, and to support the development and implementation of effective strategies and actions in the field. That is why it is essential **to improve data, analysis, and knowledge, in particular by collecting disaggregated data**. This research project encountered critical limitations to access up-to-date, quality data for several of the indicators suggested by the MIF methodology, which very much conditioned our initial selection of domains and subdomains. Furthermore, the MIF methodology embraces other domains for which data does not exist or has not been frequently collected. For future studies and research that aim to understand inequalities from a multidimensional perspective, it will be essential to access a comprehensive list of indicators used by national stakeholders to frequently monitor and assess multidimensional inequalities. The MIF indicators, which rely on a capability and human-right based approach, could be included in the list of National Statistical Indicators and collected in the National Survey Programme.

CHAPTER

1/7

INTRODUCTION

There is a broad consensus that inequality is harmful to sustainable development

1.1. BACKGROUND

There is a broad consensus that inequality is harmful to sustainable development. According to Kuznets (1955), inequality first increases with economic growth and then decreases after having reached a peak. However, recent studies show that inequality can reduce economic growth and increase poverty, and an economy may grow in the early stages without raising inequality (Alesina & Rodrik, 1994; Persson & Tabellini, 1994; Deininger & Squire, 1998; Bourguignon, 2003). Inequality can also fuel social conflicts and violence (e.g. Cramer, 2003; Østby, 2013; Ferreri-Carbonell & Ramos, 2014). Inequality is also found to be negatively correlated with happiness and life satisfaction (Dolan et al., 2008; Schneider, 2015; Tran et al., 2017). Understanding the trends and drivers of inequality is, therefore, essential not only for researchers, but also for policymakers.

Since 1987, the economy of Vietnam has experienced rapid economic growth, as well as a structural transformation from a centrally planned economy to a market-based economy. As a result of economic growth, poverty has decreased dramatically with the poverty headcount ratio (using the international poverty line of $1.25 a day (2005 PPP)) decreasing from 43.6% in 1993 to 14.3% in 2008 (Badiani et al., 2013). Until 2016, according to the international poverty line of $3.2 a day (2011 PPP), the rate was around 8.6% (Pimhidzai, 2018). Extreme poverty has almost been eliminated, with only 2% of the population living on less than 2011 PPP $1.9 per day.

There has been concern recently that economic growth may be associated with increasing inequality in Vietnam. To measure living standards in Vietnam, GSO has conducted the Vietnam Household Living Standard Surveys (henceforth VHLSSs), with technical support from the World Bank since 1993. Estimates from the VHLSSs show that expenditure inequality has been very stable in Vietnam. The Gini index of per capita expenditure was estimated at 0.357 in 1993, 0.358 in 2006, and 0.353 in 2016.

There are several issues with using income and expenditure to measure inequality. Firstly, a problem in measuring monetary inequality using household surveys is measurement errors. Rich people tend to underreport their income and consumption, while poor people might overreport. As a result, monetary inequality might be underestimated. Secondly, sample surveys do not capture super rich people in the country, and as a result using sample surveys might underestimate inequality. Thirdly, income or expenditure does not capture the multiple dimensions of well-being. There is broad consensus that inequality as well as poverty should be understood as multidimensional concepts. Individuals may be non-poor in terms of income or aggregate consumption, but their health may be poor; they may have a low educational attainment, and lack access to social inclusion or participation in decision-making. As a result, the concepts of multidimensional poverty and inequality have been developed and are measured in a large number of countries.

Although monetary inequality as measured in household surveys has not increased in Vietnam, inequalities in opportunities have entrenched the existing gaps between groups, in particular between rural and urban people, between the poor and the non-poor, between men and women, and between the Kinh/Chinese and EM groups. Nearly 45% of ethnic minorities still live in poverty. Thus, ethnic minorities who made up only 15% of the country's population in 2016, constituted 73% of the poor (Pimhidzai, 2018). There is still a gap in accessing sanitation and public services between ethnic minorities and the majority (CEMA, UNDP, and MDRI, 2017). Even within the poorer areas where ethnic minorities account for a large proportion of the population, the Kinh fare better than them (Nguyen et al., 2015). Along with economic growth, the number of super rich people, who have $30 million and more, has

been increasing in Vietnam (Knight Frank Research, 2019). Considering that not only Vietnam but the world is facing an unprecedented inequality crisis today, inequality needs to be thoroughly studied and seriously addressed (Nguyen, 2017).

In Vietnam, there are numerous studies on income and expenditure inequality. A number of studies explore the income gap among different population subgroups, such as the Kinh and ethnic groups (e.g. Nguyen et al., 2015; Bui et al., 2016; Nguyen et al., 2016; Nguyen and Nguyen, 2017). All studies show a large gap in income, consumption, and other welfare indicators between the Kinh and ethnic minorities. Nguyen and Nguyen (2017) find that EM groups have lower social and employment mobility. Nguyen et al. (2018) show that wages and non-farm business income are the two main determinants of income inequality. Over the 2004-2014 period, the contribution of wage income to total income inequality increased to 50%, while the second largest source of inequality was non-farm business income, accounting for 30%.

Regarding the drivers of the inequality, Nguyen et al. (2017) conclude that welfare disparity between urban and rural areas has mainly been due to the change in the return to household characteristics (the dramatic change in the return to education, ethnicity, and agricultural activities). Thu Le and Booth (2013) also find that rural-urban expenditure inequality have continued to increase over the years due to both covariate effects and the returns to those effects. Benjamin et al. (2017) show that agricultural opportunities, and more importantly the steady development of wage-labour markets in both urban and rural areas, have played a significant role in dampening inequality.

Few studies highlight the harmful effect of inequality on poverty reduction. For example, Nguyen and Pham (2018) show that high inequality reduces the effect of economic growth on poverty reduction in Vietnam. Nguyen et al. (2010) and Lanjouw et al. (2016) also find that districts with lower initial inequality have been more successful at poverty reduction.

Vietnam has been one of the first countries to use the multidimensional poverty approach to monitor poverty and identify poor beneficiaries for social assistance programmes and policies. The government of Vietnam has committed to the achievement of the Millennium Development Goals (MDGs) and issued a National Action Plan to implement the 2030 Agenda for Sustainable Development with 17 sustainable development goals for Vietnam by 2030 (VSDGs) which includes 115 specific targets in 2017-2020 and 2021-2030 (Decision No. 622/QĐ-TTg dated 10/5/2017). The government of Vietnam has developed a Master Plan to Transform from a Single-Dimensional to a Multidimensional Approach in Poverty Measurement, 2016-2020 (Decision No. 1614/QD-TTg dated 15/9/2015). Accordingly, a multidimensional poverty measurement has been constructed based on human rights, expressed in five basic welfare dimensions of health, education, living conditions, housing, and access to information.

Current studies have focused on monetary inequality in Vietnam. There have been none on multidimensional inequality in Vietnam. Although Vietnam has achieved relatively broad-based economic growth, there is still a large gap not only in income, but also in other dimensions of well-being between population subgroups. Our study is the first attempt to examine multidimensional inequality in Vietnam over time. In addition to monetary and asset inequality, we analyse inequality in three additional dimensions including health, education, and participation in the decision-making process.

1.2. FRAMEWORK AND RESEARCH OBJECTIVES

By examining multidimensional inequality in Vietnam over time, the study is part of the 3-year research facility on inequalities (2017-2020) by the French Agency for Development (AFD), with funds from The European Union. The objective of the research facility is to enhance the knowledge and understanding of economic and social inequalities, their drivers and underlying factors at different spatial levels, as well as determine the most effective policies and approaches to reduce them.

The study uses the Multidimensional Inequality Framework developed by the CASE/LSE, SOAS/ University of London, and Oxfam (2018). The Multidimensional Inequality Framework (MIF) draws on Sen's capability approach (Sen, 1993) to provide a method to assess inequalities in individual well-being. The approach focuses on capability deprivation (measuring differences in rates of deprivation between groups). It calls for a multidimensional approach to understanding individual and collective well-being. A key challenge in measuring multidimensional inequality through the capability approach is that there is no definitive list of capabilities. Sen (2004) provides some guidance on how a list of capabilities should be drawn up and suggests a number of key capabilities which are considered vital for well-being (being well-nourished, physically secure, mobility, etc.). The LSE and Oxfam (2018) propose 7 domains, which cover the core capabilities critical to well-being, to analyse inequality as follows.

Table 1.1. Inequality domains

Domain	Short title	Sub-title
Domain 1	Life and health	Inequality in the capability to be alive and to live a healthy life
Domain 2	Physical and legal security	Inequality in the capability to live in physical safety and legal security
Domain 3	Education and learning	Inequality in the capability to be knowledgeable, to understand and reason, and to have the skills to participate in society
Domain 4	Financial security and dignified work	Inequality in the capability to achieve financial independence and security, enjoy dignified and fair work, and recognition of unpaid work and care
Domain 5	Comfortable, independent and secure living conditions	Inequality in the capability to enjoy comfortable, independent and secure living conditions
Domain 6	Participation, influence and voice	Inequality in the capability to participate in decision-making, have a voice and influence
Domain 7	Individual, family and social life	Inequality in the capability to enjoy individual, family and social life, to express yourself and to have self-respect

Source: LSE and Oxfam (2018)

In addition to income and asset inequality, we analyse inequality in 3 domains including life and health, education and learning, and participation, influence, and voice. There are two main reasons for this choice. Firstly, household surveys are available for these domains. Vietnam has conducted Vietnam Household Living Standard Surveys since 2002. This data allows us to examine key indicators of the education and health domains over time. To analyse the 'participation, influence and voice' domain, we exploit high-quality Vietnam Governance and Public Administration Performance Index (PAPI) surveys. Secondly, we aim to focus on health and education, which are the main human capitals. Human capital plays a major role in economic development (Schultz, 1997; 2002; Hanushek and Woesmann, 2008). Educational development and health improvement are important Millennium Development Goals, as well as Sustainable Development Goals of the United Nations. Reducing inequality in education and health will narrow inequalities in employment, living standards, and social life. In Vietnam, there is an increasing recognition that good governance and public administration are important for economic growth, as well as human development (Acuña-Alfaro et al., 2010). Although Vietnam has been implementing administration reforms, there are still problems with inefficient public administration and corruption (World Bank, 2010). Thus, this study selects 'participation, influence and voice' as a third domain to examine people's capability to participate in decision-making, have a voice and influence.

Each domain is measured by different subdomains and indicators according to the suggestions from the LSE and Oxfam (2018). In this study, we cannot measure all the suggested subdomains and indicators due to the limitation of data. For each domain, we select a number of important subdomains and indicators for which data are available. We also add several indicators that can capture inequality in the domain and for which data are available. The list of subdomains and indicators is reported in Table A.1 in Appendix 2. We measure inequality in the indicators by comparing their means between different population subgroups disaggregated by gender, ethnic group, education level, poverty, expenditure and wealth quintile, urban/rural area, and geographic region.

1.3. STRUCTURE OF THE REPORT

This report is structured into seven chapters. The second chapter describes the research methodology, including our quantitative and qualitative methods. Chapter 3 reviews previous studies on inequality for each of the 7 domains in the Multidimensional Inequality Framework of the LSE and Oxfam (2018). It also analyses monetary and asset inequality in Vietnam. Monetary inequality is often used in government and international agency reports. Chapters 4, 5, and 6 examine inequalities in the three domains 'Life and health,' 'Education and learning,' and 'Participation, influence, and voice,' respectively. Finally, Chapter 7 summarises the main findings and suggests several policy recommendations.

CHAPTER

2/7

METHODOLOGY

The study follows a mixed-methods approach, with quantitative and qualitative methods in sequence

The study follows a mixed-methods approach, with quantitative and qualitative methods in sequence, in which the quantitative research work is followed by qualitative research. In addition, throughout the study, a literature review of relevant documents including reports, articles, and research papers is conducted, especially to provide an overview of the existing studies on inequality in Vietnam, or to support the qualitative study by explaining the findings from the quantitative study. When applicable, the source in the literature review is cited and its reference is added to the Reference section.

2.1. QUANTITATIVE RESEARCH METHOD

The study uses a number of datasets to analyse multidimensional inequality. The two main datasets are the Vietnam Household Living Standard Surveys (VHLSS) and the Vietnam Governance and Public Administration Performance Index (PAPI) surveys. The VHLSSs are used to analyse inequality in the overview of income and asset inequality in Vietnam and in two specific domains of the Multidimensional Inequality Framework, namely 'Life and health' and 'Education and learning.' The PAPI surveys are used to examine inequality in the 'Participation, influence, and voice' domain.

The VHLSSs have been conducted every two years by the General Statistics Office of Vietnam (GSO) with technical support from the World Bank in Vietnam since 2002. The latest VHLSS was conducted in 2018, but this survey has not been released. Thus, we use the 2002-2016 VHLSSs in this study. The VHLSSs are carried out on around 3,000 communes throughout the country. Each VHLSS samples around 9,000 households. The VHLSSs contain very detailed data on individuals, households, and communes. Household data include durables, assets, production, income and expenditures, and participation in government programmes. Data on income and expenditure are collected using detailed questionnaires. Individual data consist of information on demographics, education, employment, health, and migration.

The Vietnam Governance and Public Administration Performance Index (PAPI) surveys have been conducted annually by the United Nations Development Programme and Vietnam Fatherland Front since 2009 (CECODES, FR, CPP & UNDP, 2014). These surveys collect information from citizens on their experiences on a number of aspects of governance and public administration. In 2009, the PAPI survey was collected in three provinces, and in 2010 it was collected in 30 provinces. Beginning in 2011, each PAPI survey has covered around 14,000 individuals in all 63 provinces. By 2019, the voices of some 131,501 citizens had been reflected in annual PAPI reports.

In addition to the two datasets, we also use different data sources to estimate the indicators for the three domains. If additional datasets are used, they are noted as sources below the tables and figures.

In the overview of income and asset inequality in Vietnam, the inequality estimation methods used include: (i) inequality measurement using the Gini and Theil indexes; (ii) decomposition analysis of inequality by population subgroup; and (iii) small area estimation method. These methods are also listed in each table and figure and described in detail in Appendix 1.

2.2. QUALITATIVE RESEARCH METHOD

2.2.1. Locations for the qualitative research

With the aim of exploring the drivers of inequality in three domains ('Life and health', 'Education and learning,' and 'Participation, influence, and voice'), the research team chose to conduct qualitative research in three provinces representing the North, Central, and South regions. More precisely, in

the North, the field work was carried out in a province in the Northern midland and mountainous area. This is a disadvantaged area with limited infrastructure, remote and mountainous terrain, and bad-quality roads which are not convenient for travel. These factors could be the driver of local inequality. In the Central region, the team chose a province belonging to the Central Highlands. This is one of the two regions with the most serious problem of inequality in the country according to the analysis of relevant inequality measures. However, the quality of infrastructure is considered to be relatively good. Therefore, the research objective in this area was to determine whether factors other than infrastructure create a disparity in the access and quality of health services or in local people's participation in contributing opinions, for example, the perceptions and cultural practices of local people. Last, in the South, the research team chose to study a province in the Mekong Delta – an area also known to have high levels of inequality, especially asset inequality, according to a number of the team's previous studies. For example, a large proportion of local people do not own agricultural land and have to work as hired labour. Therefore, the research was conducted in order to understand the status quo of local inequality, as well as the relationship between asset inequality and inequality in other domains of the MIF.

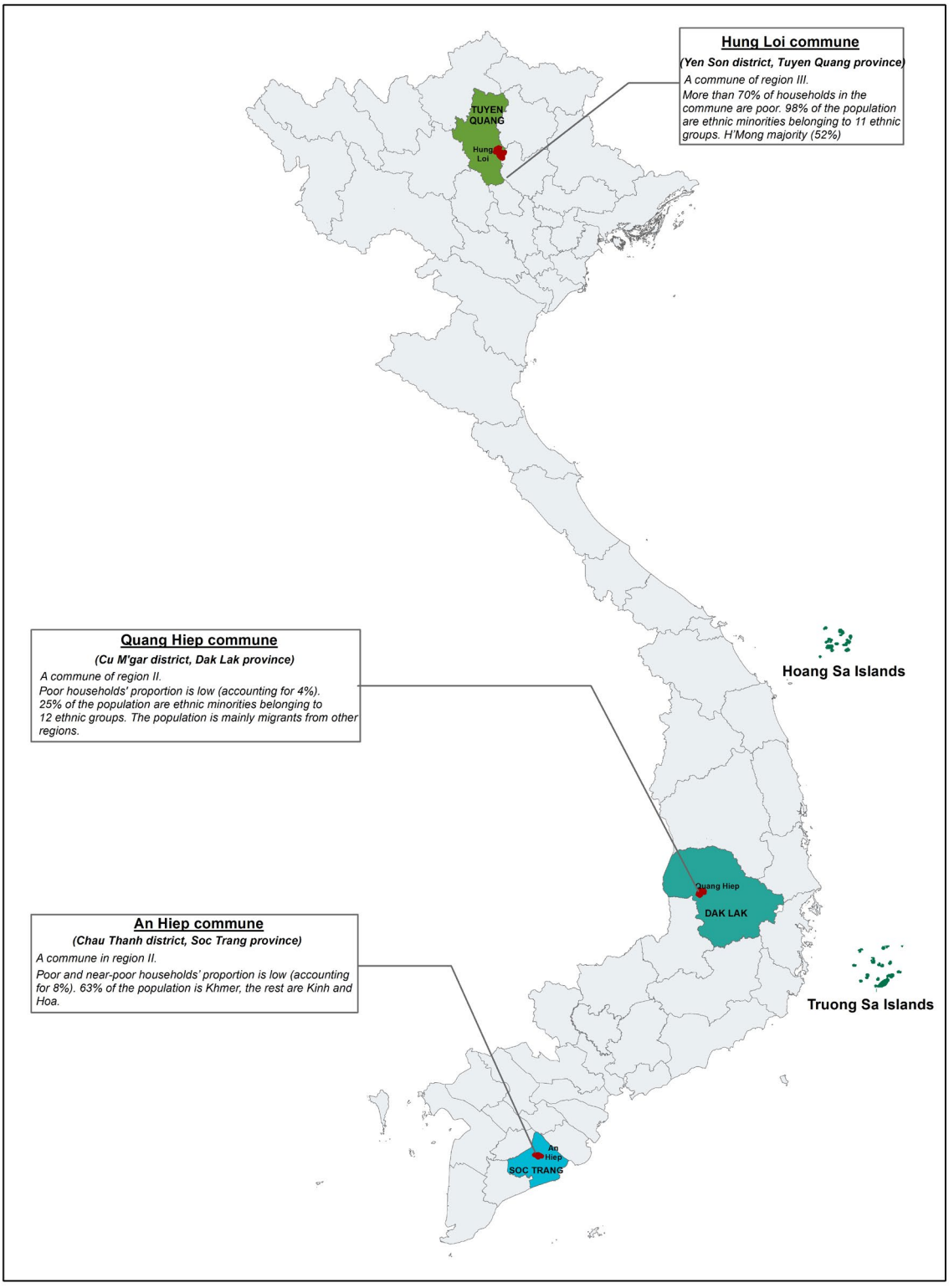
In addition, based on the list of provinces in these three regions (Northern Midlands and Mountains, Central Highlands, and Mekong Delta), which were previously involved in Oxfam's research projects, three representative provinces were selected for the qualitative research, namely Tuyen Quang, Dak Lak, and Soc Trang. In each province, one commune was selected as a qualitative research site, with the expectation that the three communes would be representative of three different economic sectors with different poverty rates, including extremely disadvantaged communes, disadvantaged communes, and communes with average economic conditions. The list of communes classified by economic status was created based on the Prime Minister's Decision No.103/QD-TTg issued on January 22, 2019, about additional approval, adjustment, and renaming the list of extremely disadvantaged villages; communes of Region III, Region II, Region I belong to ethnic minority and mountainous areas in the period 2016-2020. [1]

In each province, specific criteria for selecting a commune include:

- For Tuyen Quang Province (in the Northern midland and mountainous region): Hung Loi Commune in Yen Son District was selected because it has a diverse group of ethnic minorities, with a large proportion of population from ethnic groups such as the H'Mong, Dao, Tay, etc.
- For Dak Lak Province (in the Central Highlands region): Quang Hiep Commune in Cu M'gar District was selected because it has a diverse group of ethnic minorities, and a large proportion of population who are migrants from other regions.
- For Soc Trang Province (in the Mekong Delta region): An Hiep Commune in Chau Thanh District was selected because it has a diverse group of ethnic minorities, in which the majority of the population is Khmer. This ethnic group has a very distinctive culture and is different from the Kinh and the other ethnic groups. For example, Buddhist temples and activities play an important role in the spiritual and social life; these temples are places where the Khmer practice and spread traditional cultural values. Traditionally, when a Khmer boy grows up, he has to become a monk for a while to fulfil his religious responsibility.

[1] The criteria of extremely disadvantaged villages and communes of Regions I, II, and III are specified in Decision No.50/2016/QD-TTg issued on November 3, 2016 by the Prime Minister.

Figure 2.1. Map of the qualitative research area



Source: Authors' own illustration

Hung Loi Commune, Yen Son District, Tuyen Quang Province

Hung Loi Commune, with a natural area of 10,310 ha, is located in the south of Tuyen Quang Province, 35 km northeast of Tuyen Quang city. By 2019, the commune had 16 villages, made up of 1,610 households and 7,374 people. 98% of the population belong to ethnic minorities from 11 ethnic groups, with 52% who are H'Mong, 10% Tay, 10% Dao, and the rest are Nung, Chinese, Tong, Cao Lan, Pa Then, and some other ethnic minorities. A vast majority of the residents work in the agricultural sector, specifically crop farming (rice, corn) and cattle farming (pigs, buffaloes, and cows). High-income households in the commune usually work in the service sector or have a large-scale cattle farm. A small number of rich households have been participating in the national programme of afforestation (for about 7-8 years). Some households have escaped the poverty trap since they have shifted to unconventional economic activities (e.g. beekeeping) thanks to the support from the national Programme 135. Hung Loi Commune has 1 kindergarten, 2 primary schools with 8 satellite school sites, and 1 secondary school. Kindergartens and primary schools have good facilities, while the satellite school sites are short on standard facilities and teaching supplies. Besides, students in remote areas have trouble travelling to satellite school sites. The commune has one healthcare centre. However, people often visit the ATK Regional General Hospital in the next commune (Trung Son Commune).

Figure 2.2. Hung Loi Commune's Primary School – Tau Lin satellite school site

Source: Tuyen Quang Newspaper (2)

(2) http://hdndtuyenquang.gov.vn/tin-hoat-dong/hdnd-huyen-thanh-pho/hoat-dong-giam-sat-cua-hdnd-huyen-yen-son-chat-luong-di-doi-voi-trach-nhiem-315.html

Figure 2.3. Quang Hiep Commune's healthcare centre

Source: Authors' own photograph

Quang Hiep Commune, Cu M'gar District, Dak Lak Province

Quang Hiep Commune was established in 2002 with a natural area of 5,425 hectares, located in the west of Dak Lak Province, 12 km northwest of Quang Phu town centre. By 2019, the commune had 12 villages with nearly 3,000 households, amounting to nearly 13,000 people. The people in the commune are mainly migrants from the Northern provinces. According to unofficial statistics, the people of Quang Hiep Commune come from 47 provinces/cities. There are 13 ethnic groups living there, but very few of them are indigenous ethnic minority villages. The proportion of ethnic minorities is approximately 25% of the commune's population, mainly from the Ede group and Northern ethnic minorities who immigrated, such as the Tay group. The local soil is fertile, suitable for a variety of crops, especially industrial crops of high economic value, and can be exported. The major crops currently include coffee, pepper, and cashews. The per capita income is relatively high. Poor households account for only 4% of total households in the commune, quite rich and average households account for 66%, and rich households account for 30%. It is among the five communes with the highest living standards in the district. The infrastructure is invested synchronously, the transportation is convenient, and 100% of households have access to the national electricity grid. Local people's education level is relatively high. Culture, arts, and sports are promoted. The commune was commended for its "Piggybank" initiative to help people escape poverty. Accordingly, the funds raised annually are used to supply breeding animals for poor households in the commune. There is a club to promote women's access to local and state policies and laws. There are 5 schools in the commune, including 2 kindergartens, 2 primary schools, and 1 secondary school. The commune has a healthcare centre to meet the basic needs of people, in addition to a number of private healthcare facilities. Quang Hiep has been recognized as the new rural standard since 2017.

An Hiep Commune, Chau Thanh District, Soc Trang Province

An Hiep Commune was established in 1988 with a natural area of 3,553 ha. By 2019, the commune had 7 hamlets (villages) with 3,820 households, amounting to 14,853 people. The majority of the population (63%) in the commune is Khmer, the rest are Chinese and Kinh. Social and religious activities in the commune are rich in Khmer culture. The main economic activity of the locality is handicraft and agriculture. There is an industrial park close to the commune that has contributed to its job creation and economic development. By the end of 2019, it had 69 poor and 252 near-poor households, accounting for 8% of the total number of households across the commune. An Hiep Commune has 1 kindergarten, 3 primary schools, 2 secondary schools (including 1 ethnic boarding school) with relatively good facilities. The commune has 1 healthcare centre and a network of collaborators in all hamlets to handle the local situation. The healthcare centre is not too far from the hamlets, so people can easily access healthcare services, with over 95% of the population in the commune having health insurance. An Hiep Commune has been recognized as a new rural standard since the end of 2018.

Figure 2.4. An Hiep Kindergarten in An Hiep Commune

Source: Authors' own photograph

2.2.2. Qualitative research toolkit

The toolkit is used for the purpose of gathering additional information to supplement and complete the analysis of the quantitative research and to understand and interpret its results. From that, a clear story can emerge about the status quo and drivers of inequality in the access and quality of education, health, and voice of people in different regions. At the same time, people's concerns about inequality in other domains, such as income, employment, skills, living conditions, social life, etc. can be further examined. More importantly, the toolkit aims to explore the connectivity of different inequality domains to make appropriate and satisfactory recommendations.

The research team used two main methods: **Focus Group Discussions (FGD)** and **Key Informant Interviews (KII)**. In each province, the team interviewed representatives of the commune leaders, including Head/Vice Head of the People's Committee, Head/Vice Head of the Primary School, Head of the Healthcare Centre, Representative of the Women's Union, Representative of the Farmers' Union, Representative of the Fatherland Front, and Village Head, and conducted two FGDs with men and women, followed by visits and in-depth interviews with four representatives from these FGDs. The KIIs and FGDs were audio-recorded upon participants' consent.

The data collected was transcribed and organised according to pre-determined questions, from which direct quotations were used in the writing of the report, for example to tell local human stories featuring the existence of inequality (if any).

The topic of FGDs and KIIs focuses on understanding the status quo of inequalities in the access and quality of healthcare services, education, and community participation among different population subgroups, including male/female, ethnic groups, and groups of different economic status. By detecting and comparing the differences in perceptions, attitudes, and actions among these groups, the research can identify root causes and make recommendations accordingly to reduce poverty and inequality in people's socio-economic lives.

The research team contacted the Commune People's Committee to collect data on some initial statistical indicators (over the past 10 years, 2008-2018) before going to the location for a preliminary assessment of its economic and demographic characteristics to adjust the questions of FGDs and KIIs with commune officials and people. The information includes:

- Sex ratio at birth
- Infant mortality rate/ Under-five mortality rate/ Maternal mortality rate
- Average life expectancy
- Prevalence of underweight/stunting/obesity of children
- Number and status of people with disabilities within the management/support of the commune
- Rate of children enrolled in preschool/primary school/secondary school
- Rate of children dropping out of school/not attending school
- Average years of schooling for adults (over 18 years old)
- Literacy rate of adults (over 18 years old)
- Number of children with disabilities at school age within the management/support of the commune and its schools

Key informant interviews

In each of the three communes participating in the study, **individual and group interviews** were held with representatives at the commune and village levels. The duration of each interview was 30-45 minutes. The specific KII content for each participant is described in Appendix 3.

Table 2.1. Number of KIIs in the qualitative research

Participant	Tuyen Quang Yen Son District Hung Loi Commune	Dak Lak Cu M'gar District Quang Hiep Commune	Soc Trang Chau Thanh District An Hiep Commune
Head/Vice Head of Commune People's Committee	1	1	1
Head of commune healthcare centre	1	1	1
Head/Vice Head of the primary school	1	1	2
Representatives of Fatherland Front/ Women's Union/Farmers' Union/Village Head	1	1	1
Representatives of male/female of 4 households who participated in the FGDs	4	4	4
Total	8	8	9

Focus group discussions

The objective of FGDs with household representatives is to observe how different population subgroups interact and to discuss their views/opinions on education-health issues and the contributions of their voice to community work. In each of the three communes participating in the study, two FGDs were to be organised with participants who were male and female, from households of different economic status (better-off households, poor or near-poor households) and belonging to many different ethnic groups. Each discussion was not to exceed 1 hour. Priority was given to participants who could understand Vietnamese. If participants had difficulty understanding Vietnamese, an interpreter was asked for help, but this could make participants hesitant and inactive in the discussion. The specific content of FGD activities are described in Appendix 3.

Table 2.2. Number of FGDs in the qualitative research

Participant	Tuyen Quang Yen Son District Hung Loi Commune	Dak Lak Cu M'gar District Quang Hiep Commune	Soc Trang Chau Thanh District An Hiep Commune
Male FGD	1	1	1
Female FGD	1	1	1
Total	2	2	2

CHAPTER

3/7

OVERVIEW OF INEQUALITY STUDIES IN VIETNAM

This study explores what the situation of inequalities is in three domains that are health, education, and participation through both quantitative and qualitative analysis

3.1. LITERATURE REVIEW

Domain 1. Life and health: Inequality in the capability to be alive and to live a healthy life

Inequality in health status and in access to healthcare services hold back disadvantaged groups. Though provided with free-of-charge health insurance cards (according to Point 3, Article 12 of Law no. 46/2014/QH13 – Amendments to the Law on Health Insurance), poor households still have to pay many other things such as expenses for health consultations and treatment, equipment and medicine (and other out-of-pocket payments). According to Nguyen (2017), a large proportion of the total health spending – equivalent to 48% – is still paid out of pocket.

A quick look at statistics reveals that pregnant women from poor households are three times more likely to go without antenatal care (World Bank, 2014). Malnutrition rates among ethnic minority children are double those of the majority, and children of poor families are more likely to be malnourished (World Bank, 2014). According to the results from Vietnam Multiple Indicator Cluster Surveys (MICS) 2000, 2006, 2011, and 2014, the improvements in antenatal and skilled birth attendance have been uneven across different segments of the population, and the degree of inequality is likely to increase (Chuong et al., 2018). Health service utilisation, as evidenced by contraceptive use, was significantly associated with age, education, and income (Hanh, Tuan, Anh, Ha, & Anh, 2018).

Domain 2. Personal safety and security: Inequality in the capability to live in physical safety and legal security

Studies in Vietnam covering this domain have not been varied or every subdomain has not been well addressed. Most of them have focused on investigating the issue of violent crime and physical or psychological violence, which is deemed the tip of the iceberg in inequality in personal safety and security.

In Vietnam, the main victims of violent crime and physical/psychological violence include women and children. According to the Ministry of Public Security, between 2012 and 2017, a total of 3,090 people, of whom 90% were women and children from ethnic minorities living in remote, mountainous areas, were trafficked, mainly to China (Vu, 2018).

The use of violent discipline in the home is still widespread, as evidenced by the MICS 2014 finding that more than 70% of children aged 2 to 14 experienced violent discipline (psychological aggression and/or physical punishment) in the month before the survey, middle childhood (ages 5 to 9) being the period when they are most likely to be disciplined in a violent manner.

Domain 3. Education and learning: Inequality in the capability to be knowledgeable, to understand and reason, and to have the skills to participate in society

While Vietnam's performance in education far exceeds the average for comparable countries in the region, gaps in performance between poor and non-poor households and between male and female students have widened over time.

The disparity in upper secondary enrolment rates between children living in poor and non-poor households reached more than 24 percentage points in 2016 (estimation from VHLSS). According to the World Bank (2014), children from poor families are much less likely to attend secondary school. Also, Oxfam emphasizes that fees continue to act as a barrier to access to education for the poor. The access to education has also been proven to be gender-biased and ethnic-minority-biased, as evidenced by

the fact that ethnic minority girls are substantially less likely than boys to continue on to secondary school, college, and university. As a consequence, female workers have been more likely to be unskilled, untrained, and limited to labour-intensive and low-wage work. In addition, inequalities in education quality between schools are noteworthy. A report by Dang and Glewwe (2017) provides evidence that the variation within schools contributes 60% of the overall variation in students' test scores, while the variation across schools and provinces accounts for the other 40%, which implies that 'special' classes have an effect on disparities in education quality within schools. Tutoring and differences in the quality of schools between poor and non-poor communities, and urban and rural areas explain the variation in academic achievement at the lower secondary level, which determines the progression to tertiary education. This indicates that inadequate teaching places poor and ethnic minority children living in rural areas at a disadvantage.

However, in recent years, gender gaps have emerged in upper secondary education as female students outperform their male peers. Enrolment rates for girls and boys have been broadly equal from the early childhood to lower secondary levels, and have increased at a similar pace. In 2010, net enrolment rates in upper secondary education were also equal at about 34%, but by 2016 the rate for female students had risen to 43.5%, while the rate for male students had reached just 39.6%. Similarly, the upper secondary completion rate among females aged 20-24 was 67% in 2016, compared to 51% for male students (Pimhidzai, 2018).

Domain 4. Financial security and dignified work

There are several studies on inequality in this domain in Vietnam. The estimates from the VHLSSs show that expenditure inequality has been very stable in Vietnam. The Gini index of per capita expenditure was estimated at 0.357 in 1993, 0.358 in 2006, and 0.353 in 2016. Nguyen and Pham (2018) show that high inequality reduces the effect of economic growth on poverty reduction in Vietnam. Nguyen et al. (2010) and Lanjouw et al. (2016) also find that districts with lower initial inequality have been more successful at poverty reduction.

Regarding the drivers of inequality, Nguyen et al. (2017) conclude that welfare disparity between urban and rural sectors has mainly been due to the change in the return to household characteristics (the dramatic change in the return to education, ethnicity, and agricultural activities).

A number of studies explore the income gap among different population subgroups, such as between the Kinh and other ethnic groups (e.g. Nguyen et al., 2015; Bui et al., 2016; Nguyen et al., 2016; Nguyen and Nguyen, 2017). All studies show a large gap in income, consumption, and other welfare indicators between the Kinh and ethnic minorities. Nguyen and Nguyen (2017) find that ethnic minority groups have lower social and employment mobility.

Truong and Le (2016) review the implementation of tax incentives in Vietnam and find that despite the government's generous incentives for projects located in less developed regions, investment from the outside, especially in the agricultural sector, for these regions has remained low. The FDI for agriculture is around 7%, while the sector accounts for 18% of the GDP.

Domain 5. Comfortable, independent and secure living conditions: Inequality in the capability to enjoy comfortable, independent and secure living conditions

Oxfam has investigated disparities between ethnic groups and found them to be significant, with the Kinh and Chinese majority tending to have high living standards (Nguyen, 2017).

According to the GSO's 2016 VHLSS, only 78.4% of the lowest quintile lived in permanent/ semi-permanent houses, while the highest quintile's figure was 98.4%. Regarding the access to clean drinking water, only 13.4% of the lowest quintile and up to 61% of the highest quintile used tap water as their main source of drinking water in 2016, which was higher than 6% and 50% in 2006, yet the gap is still wide. The proportion of the population with access to the national electricity grid was above 90% for every income quintile. Data on the living area per capita is also available with that of the highest income quintile double that of the lowest one. VHLSS data can also be disaggregated by other characteristics, such as ethnicity, gender, region, province, etc.

Domain 6. Participation, influence and voice: Inequality in the capability to participate in decision-making, have a voice and influence

Oxfam has found that ethnic minorities, small-scale farmers, migrants, informal workers, and women are more likely to remain poor, excluded from services and political decision making, and continue to face discrimination (Nguyen, 2017). In addition, the richest and most privileged are able to influence policy in their favour, while the poorest and most marginalized citizens are unable to make their voices heard. Oxfam has also identified a lack of women in the top positions in business and politics, and implied that the rules are unlikely to change in their favour. There are 20 ministers in the current Vietnamese government and only one of them is female.

Domain 7. Individual, family and social life: Inequality in the capability to enjoy individual, family and social life, to express yourself and to have self-respect

The 2016 Law on Belief and Religion, scheduled to take effect in January 2018, states that all citizens have the freedom of belief and religion. However, according to the Report on International Religious Freedom for 2017 published by the Bureau of Democracy, Human Rights, and Labor (U.S. Department of State), the current law provides for significant government control over religious practices and includes vague provisions allowing for restrictions on religious freedom in the stated interest of national security and social unity.

There have been two reports of deaths of religious group members in police custody; the authorities said they were suicides, but the families claimed that they involved police use of force. Members of recognized groups or those with certificates of registration are reportedly able to practice their beliefs with less interference, although some recognized groups reported more difficulty in gathering. Religious leaders, particularly those representing groups without recognition or certificates of registration, have reported various forms of government harassment, including physical assault, arrests, prosecutions, monitoring, travel restrictions, property seizure or destruction, and denials of registration and/or other permissions.

There have been reports of severe harassment in the Central and Northwest Highlands and for Catholics in the north-central region of the country, especially in Nghe An and Ha Tinh Provinces. Religious followers have reported that local or provincial authorities were responsible for the majority of the harassment incidents. Members of religious groups have said that some local and provincial authorities used the local and national regulatory systems to slow, delegitimize, and suppress the religious activities of groups that resisted close government management of their leadership structures, training programmes, assemblies, and other activities.

Government policies and programmes in Vietnam that target inequality in income distribution and social welfare

According to Cao and Akita (2008), while rural policymakers focus on eradicating hunger and reducing poverty, urban policymakers focus mainly on reducing the income gap between those with different education levels, housing situations, employment statuses, etc. In some cases, policies that were intended to promote development throughout the whole population turned out to be urban-biased in practice. This is difficult to avoid since economic activities in most countries, particularly in developing countries, tend to concentrate in urban areas, and urban incomes increase more rapidly than rural incomes. Urban regions are targeted for rapid industrialisation and modernisation, in order to develop strong industrial and service sectors, while also pioneering a knowledge-based economy. In contrast, rural regions are targeted to promote income diversification.

To increase the opportunities for poor ethnic minorities to benefit from economic growth, the government of Vietnam implemented a programme entitled 'Socio-economic Development for the Communes Facing the Greatest Hardships in the Ethnic Minority and Mountainous Areas' in 2006–2010. According to an impact evaluation study by Nguyen et al. (2015), the programme had positive impacts on several important outcomes of ethnic minority households, including productive asset ownership, household durables ownership, and rice productivity.

Still, Oxfam Vietnam (Nguyen, 2017) finds that the policies designed to reduce poverty among ethnic minorities are limited in their effectiveness and efficiency, are non-participatory, and fail to meet the needs of these groups. In addition, gender analysis is not provided for in the state budget. Oxfam also states that the tax system in Vietnam is another challenge in the fight against inequality, explaining that VAT (value-added tax) is a regressive tax that places a disproportionate burden on the poorest people. Tax avoidance and evasion have been used by the richest multinationals to neglect their duty to contribute to the budget. With regard to the wage policy, minimum wages have increased but do not apply to the majority of unskilled and informal workers.

There are several research papers examining the relationship between fiscal policies and inequality in Asian countries. The results also discuss some options for improving the effectiveness of fiscal policies as well.

Claus et al. (2014) assess the impact of government fiscal policies on income inequality in Asia. They discuss the role and effectiveness of redistributive fiscal policies and quantify the effects of taxation and government expenditure on income distribution. Panel estimations for 150 countries with data between 1970 and 2009 confirm the international empirical findings for Asia. Tax systems tend to be progressive, but government expenditures are a more effective tool for redistributing income. Moreover, the results suggest some distinctive differential distributive effect for government expenditures on social protection. Social protection spending appears to increase income inequality in Asia, whereas it reduces it in the rest of the world. Government expenditure on housing also adversely affects the distribution of income in Asia.

Lee, Lee, and Park (2014) examine the relationship between growth policies/strategy and inequalities in developing Asia, with the aim of deriving policy lessons that can help the region achieve more inclusive growth. A comparison of the experiences of the PRC and India indicates that, while both countries are now explicitly pursuing more inclusive growth, the PRC has been more successful so far in this regard. The experience of the Republic of Korea provides a benchmark for developing Asia, since the

country achieved growth with equity during its high growth period. The most important policy factor that enabled the Republic of Korea to contain inequality was large investments in public education. A rural development programme also helped. Finally, while there is no one-size-fits-all set of inclusive growth policies/strategy, there are a number of recurrent themes that resonate across all countries and income levels. Access to education, in particular, seems to be an effective policy tool.

3.2. MONETARY AND ASSET INEQUALITY IN VIETNAM

3.2.1. Trends in inequality

In this section, we use data from the VHLSSs from 2002 to 2016 to examine monetary (income or expenditure) and asset inequality over time in Vietnam. Monetary inequality is measured by the Gini and Theil indexes (See Appendix 1 for a presentation of the measurement method).

As mentioned above, we measure living standard by several indicators. The most common indicators used to analyse inequality and poverty are income and expenditure. Table 3.1 reports estimates of mean per capita income and expenditure over time using the VHLSSs. We adjust all the variables to the price of January 2016 for comparison. Both per capita income and per capita expenditure have increased over time. During the 2014-2016 period, per capita income and expenditure increased by nearly 7% annually. In 2016, per capita income and expenditure was 35,943 and 32,538 thousand VND, respectively. (3)

It should be noted that there is a gap in expenditure between 2008 and 2010 because of changes in the sampling frame and questionnaires. Food consumption is asked for the whole year in VHLSSs 2002 to 2008, while food consumption is asked for the last month, then annualised in VHLSSs 2010 to 2016.

Since the 2010 VHLSS, there are data on the housing value of households. There was a high increase in the real estate in 2009, so that housing prices were high in 2010. In 2016, the average per capita housing value was around 220 million VND.

Table 3.1. Living standards over time

Year	Per capita income (thousand VND)	Per capita expenditure (thousand VND)	Per capita expenditure on electricity (thousand VND)	Housing value per capita (thousand VND)
2002	13,626	10,374	273	n.a.
2004	15,924	11,966	345	n.a.
2006	18,433	14,051	381	n.a.
2008	19,144	14,258	391	n.a.
2010	25,897	25,427	510	211,888
2012	28,890	26,568	577	203,939
2014	31,641	28,609	734	210,147
2016	35,943	32,538	865	219,997

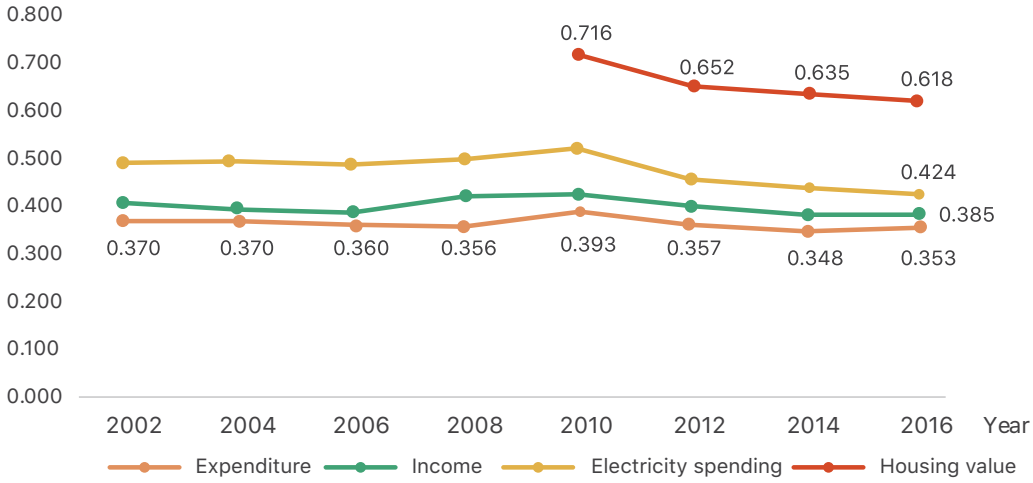
Note: The variables are measured in Jan. 2016 prices. There are no data on house value before the 2010 VHLSS.
Source: Estimations from VHLSSs.

(3) In January 2016, 1 US dollar was equal to 22.3 thousand VND.

Figure 3.1 presents the Gini indexes for the four living standard indicators over time. It shows that inequality in the four indicators was stable over time. Inequality in expenditure is lower than inequality in income and in electricity consumption. In 2016, the Gini index for per capita expenditure was 0.353, while that for per capita income was 0.385. The one for electricity consumption was 0.424. Housing value has a much higher inequality distribution, with a Gini index of 0.618. It means that inequality in assets is much higher than inequality in income or consumption.

The figure shows a peak in inequality, especially in per capita expenditure and housing value in 2010. One reason is that there was a large increase in housing prices in 2010 in big cities. The Gini index for housing value is very high in 2010. Per capita expenditure consumption includes the imputed value of housing rentals. Thus, the increase in housing value for some households can cause a higher inequality in expenditure.

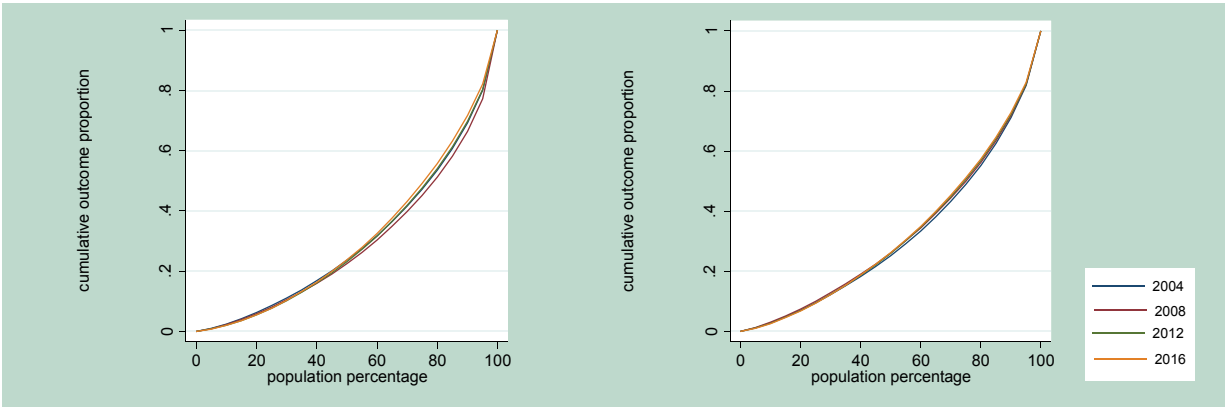
Figure 3.1. Gini indexes over time



Source: Estimations from VHLSSs.

Using the Gini index to compare inequality can be misleading if Lorenz curves are intersected. In Figure 3.2, we plot the Lorenz curves on income and expenditure over time. It shows that the Lorenz curves are very close without intersecting. This suggests that inequality is very similar over time.

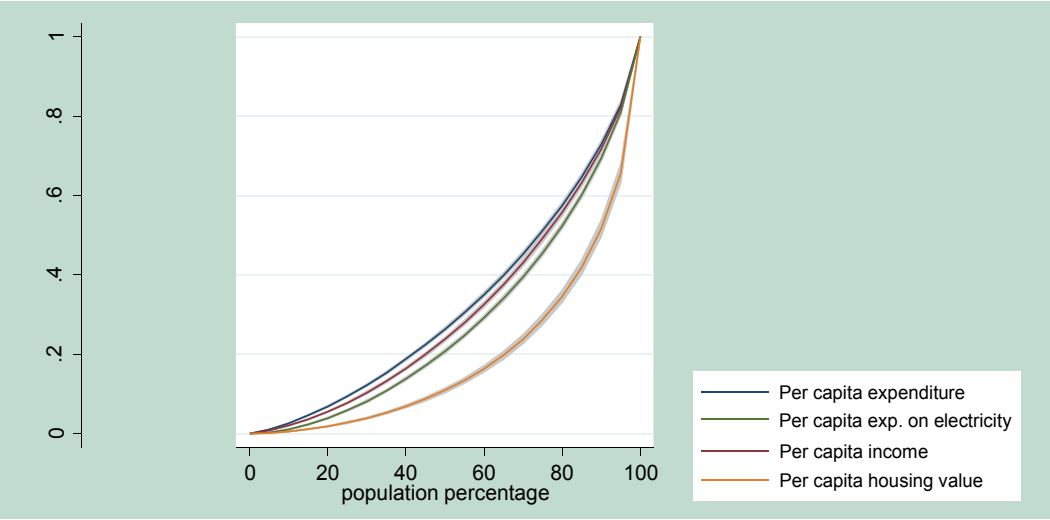
Figure 3.2. Lorenz curves of per capita income and expenditure over time



Source: Estimations from VHLSSs.

Figure 3.3 compares the distribution of different living standard indicators using a Lorenz curve. It confirms that among the four indicators, inequality in housing value is the highest, while inequality in per capita expenditure is the lowest.

Figure 3.3. Lorenz curve of different living standard indicators



Source: Estimations from VHLSSs.

In Table 3.2, we examine the sensitivity of the measurement of inequality to different inequality indexes. It reports the inequality indexes of per capita expenditure. The inequality indexes of other indicators of living standard (income, electricity consumption, and housing value) are presented in Tables A.1 to A.3 in Appendix 2. The results show that inequality as measured by the Theil index and the ratio of 90th to 10th is stable over time. However, the ratio of 95th to 5th has slightly increased, from 7.9 in 2002 to 8.3 in 2016.

Table 3.2. Inequality measures of per capita expenditure

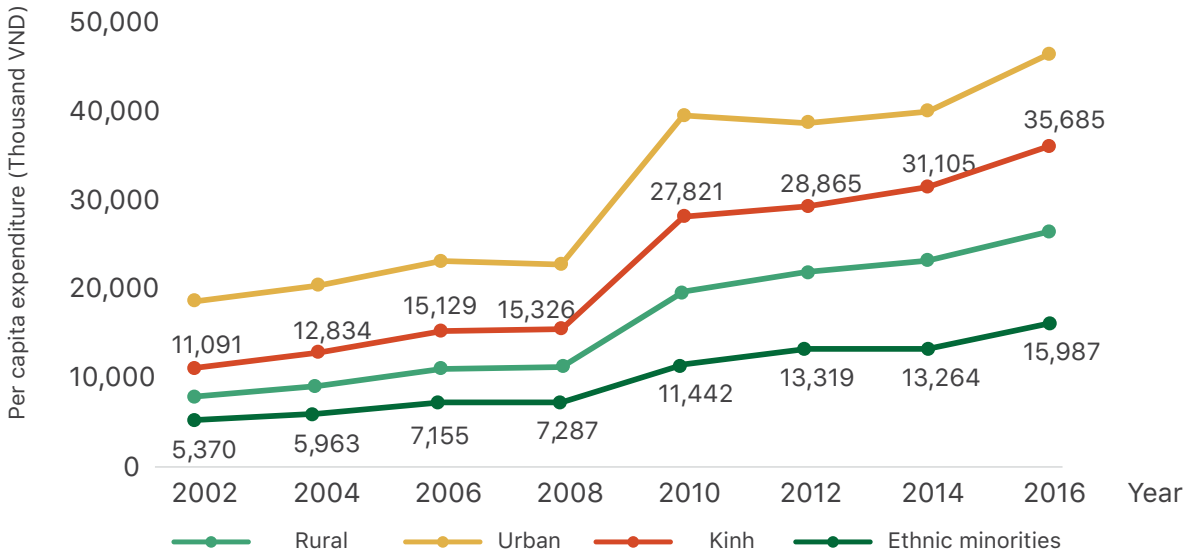
Year	Gini	Theil's L	Theil's T	Ratio $90^{th}/10^{th}$	Ratio $95th/5^{th}$
2002	0.37	0.22	0.25	4.9	7.9
2004	0.37	0.22	0.24	5.1	8.4
2006	0.36	0.21	0.23	4.9	7.8
2008	0.36	0.21	0.23	4.8	7.6
2010	0.39	0.26	0.29	5.5	9.4
2012	0.36	0.21	0.23	4.9	8.0
2014	0.35	0.21	0.22	4.8	8.1
2016	0.35	0.21	0.22	4.9	8.3

Source: Estimations from VHLSSs.

3.2.2. Inequality between the Kinh and ethnic minorities

Vietnam has 54 ethnic groups, with the Kinh majority accounting for 85 percent of the total population. Ethnic minorities live in mountains and highlands, while the Kinh tend to live in delta and coastal areas. Vietnam achieved remarkable success in economic growth and poverty reduction during the past decades. However, a large gap in living standards remains between the Kinh and ethnic minority groups (Bui et al., 2016). Figure 3.4 shows that the gap in per capita expenditure between the Kinh and ethnic minorities has been widening over time. Figure 3.4 also shows a gap in living standard between urban and rural areas. However, this gap is smaller than that between the Kinh and ethnic minorities. Thus, in this study, we focus on the gap between the Kinh and ethnic minorities.

Figure 3.4. Per capita expenditure of the Kinh and ethnic minorities



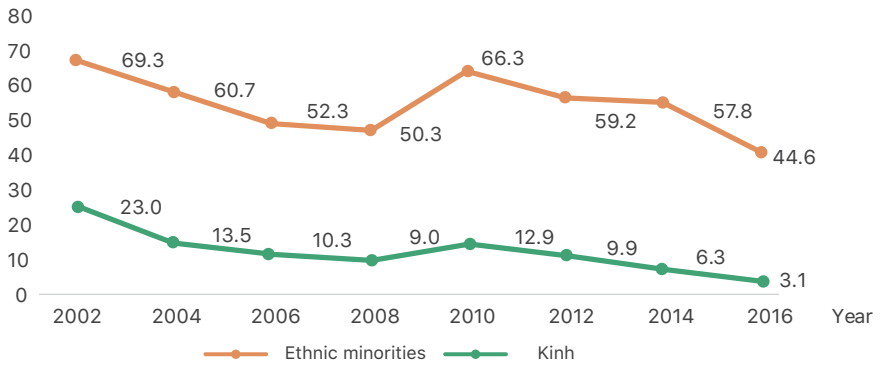
Note: The variables are measured in Jan. 2016 price.
Source: Estimations from VHLSSs.

Vietnam has achieved great success in poverty reduction. Figure 3.5 shows the expenditure poverty rate of the Kinh and ethnic minorities over time. We used the expenditure poverty line, which is estimated by the World Bank (WB) and the General Statistics Office (GSO) of Vietnam. It should be noted that the real poverty line was increased in 2010. As a result, the poverty rate increased between 2008 and 2010.(4)

Although both the Kinh and ethnic minorities have experienced poverty reduction, the poverty rate was much higher among ethnic minorities than among the Kinh. The poverty rate for the whole country in 2016 was 9.8%; that of the Kinh was 3.1%, while nearly 45% of ethnic minorities still lived in poverty (Figure 3.5). Thus, ethnic minorities, who made up only 15% of the country's population, constituted 73% of the poor in 2016.

(4) The poverty line for the 2002-2008 period corresponds to the expenditure level that allows for food consumption providing 2,100 calories per day per person and some essential non-food consumption. From 2010 onward, the minimum number of calories used to draw the poverty line was increased to 2,230 per day per person. The consumption basket has also been updated since the 2010 VHLSS.

Figure 3.5. Expenditure poverty rate of the Kinh and ethnic minorities

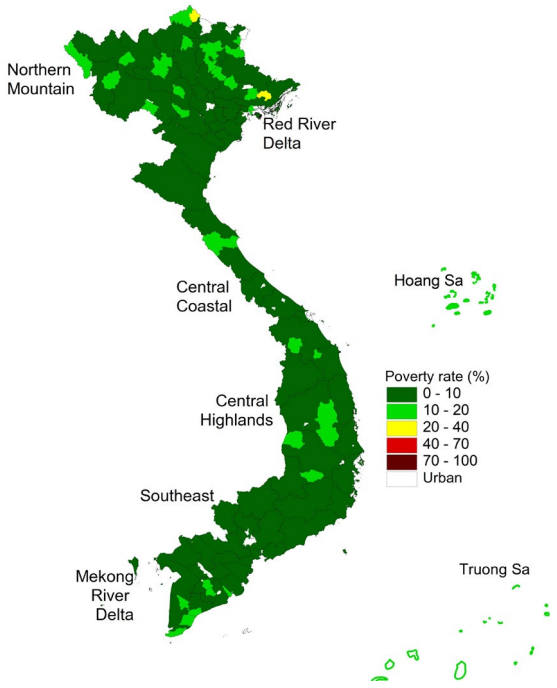


Source: Estimations from VHLSSs.

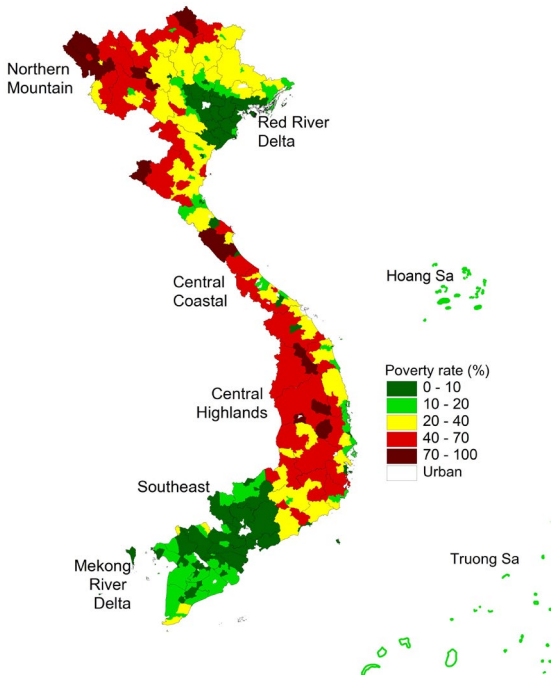
Using the poverty estimate in 2009, Lanjouw et al., (2016) find that even within the poorer areas where ethnic minorities account for a large proportion of the population, the Kinh fare better than the former. In this study, we estimate the poverty rate of districts for rural areas in 2016. We employ the small area estimation method from Elbers et al. (2002, 2003), and combine data from the 2016 Rural, Agricultural and Fishery Census and from the 2016 VHLSS to estimate the poverty rate of all 54 ethnic minorities and that of districts in rural areas. Figure 3.6 shows a large gap in the poverty rate between the Kinh and ethnic minorities in almost all districts throughout the country. In the same areas, ethnic minorities have a higher poverty rate than the Kinh. It means that the geographic variation in the poverty rate is mainly due to the variation in the share of ethnic minorities.

Figure 3.6. Poverty rate of the Kinh and ethnic minorities by district

A. Poverty rate of the Kinh



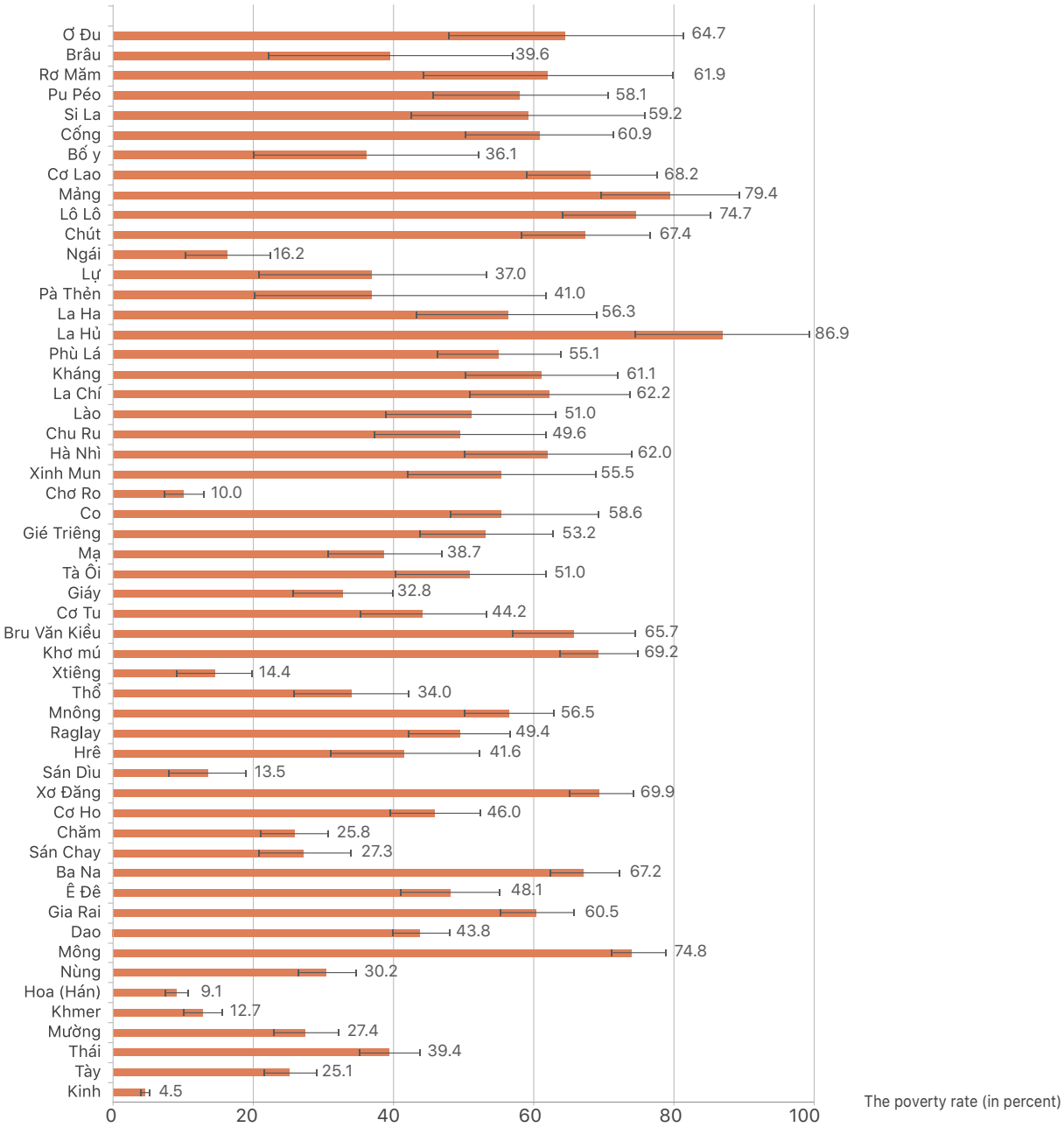
B. Poverty rate of ethnic minorities



Source: based on small area estimations from the 2016 VHLSS and the 2016 Rural, Agricultural and Fishery Census of Vietnam.

Figure 3.7 presents the poverty rate of 54 ethnic groups in rural areas for 2016. Since we predict the poverty rate using small area estimations, there are relatively large standard errors associated with the predictions. Thus, we also report the 90% confidence interval for comparing the poverty rate among ethnic groups. As mentioned above, ethnic minorities are much poorer than the Kinh. Moreover, there is a relatively large variation in poverty among these ethnic groups. The Kinh and Chinese have the lowest poverty rate. Small ethnic groups with a population below one million tend to have higher poverty rates than large ones. Ethnic groups such as the La Hu, Mang, and Lo Lo have the highest poverty rates at around 80%. A special case is the Mong, a large ethnic group with a very high poverty rate.

Figure 3.7. 90% confidence interval for the rural poverty rate of ethnic groups, 2016

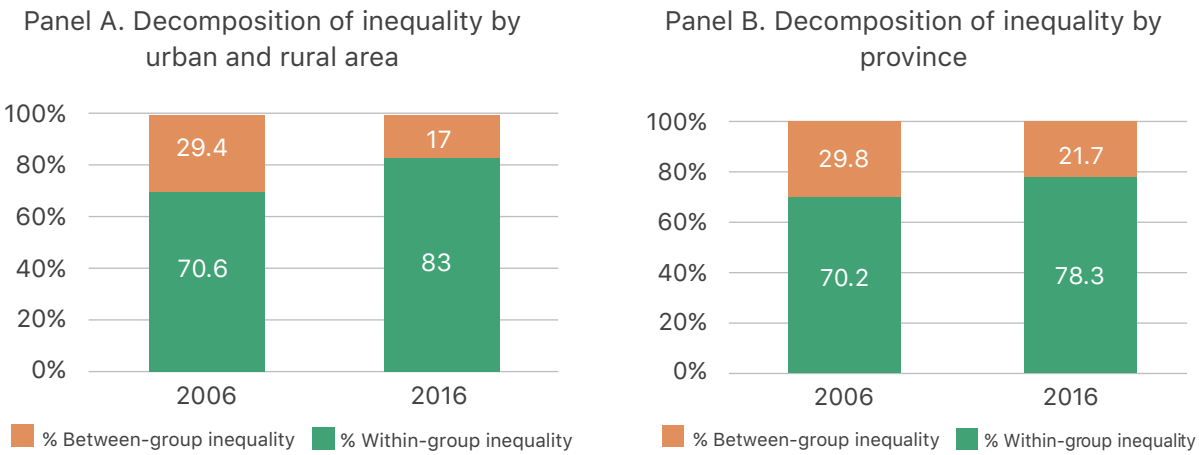


Source: based on small area estimations from the 2016 VHLSS and the 2016 Rural, Agricultural and Fishery Census of Vietnam.

3.2.3. Decomposition of inequality by population subgroup

To understand the drivers or sources of inequality, we conduct decomposition analysis of inequality by population subgroup (see Appendix 1 for the method). Figure 3.8 presents the decomposition of inequality by urban/rural area and by province. We report the decomposition of the Theil L index. The results from the decomposition of the Theil T index are very similar and not presented. Panel A of the figure shows that the main contribution to total inequality is the inequality within the urban or rural group instead of the inequality between the urban and rural groups. The within-group inequality accounted for 70.6% of total inequality in 2006 and increased to 83% in 2016. There is a large variation in the per capita expenditure within urban areas, as well as within rural ones. Panel B of the figure also shows a large contribution of inequality within provinces to total inequality.

Figure 3.8. Decomposition of expenditure inequality by urban/rural area and province (in percent)

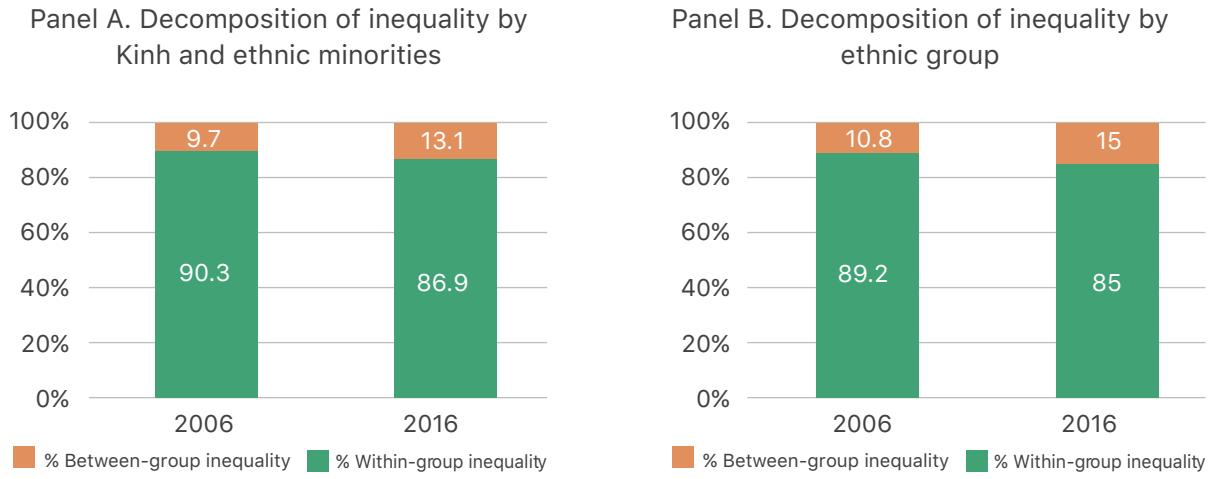


Note: the living standard is measured by per capita expenditure. This figure reports the decomposition of the Theil L index of per capita expenditure.

Source: Estimations from VHLSSs.

Figure 3.9 presents the decomposition of total inequality, which is measured by the Theil L index of per capita expenditure. Panel A shows that the inequality within the Kinh and within ethnic minorities accounted for 86.9% of total inequality. The inequality between the Kinh and ethnic minorities accounted for only 13.1%. However, this share increased over the 2006-2016 period, which implies that the gap between the Kinh and ethnic minorities tended to increase over this period. Panel B presents the decomposition of total inequality into inequality between 54 ethnic groups and inequality within each group. The inequality within each group is still a main contribution to total inequality. However, the inequality between ethnic groups tended to contribute more to total inequality. Thus, the gap between ethnic groups increased over time.

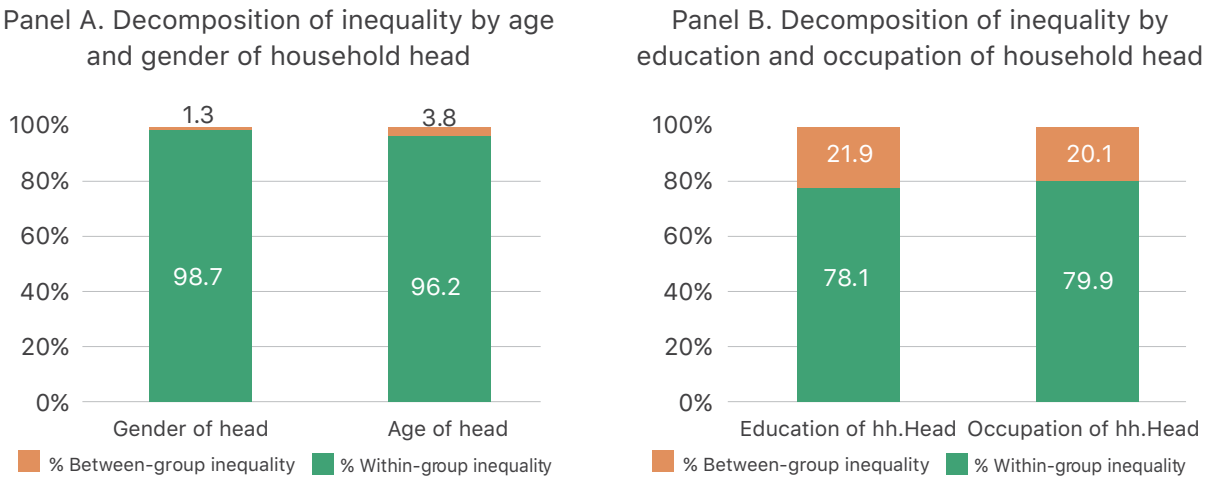
Figure 3.9. Decomposition of expenditure inequality by ethnic group (in percent)



Source: Estimations from VHLSSs.

In Figure 3.10, we decompose total inequality in 2016 into within- and between-group components. The different groups are defined by the different characteristics of the household heads. Inequality between households with heads of different ages and genders contributes little to total inequality (Panel A). It means that the age and gender of household heads are not important determinants of household expenditure. Education and occupation are more important in determining household expenditure. The inequality components due to the differences in occupation and education contribute more to total inequality (Panel B). Specifically, the between-education-group inequality and the between-occupation inequality contribute 21.9% and 20.1% to total inequality, respectively.

Figure 3.10. Decomposition of expenditure inequality by household head characteristic, 2016 (%)

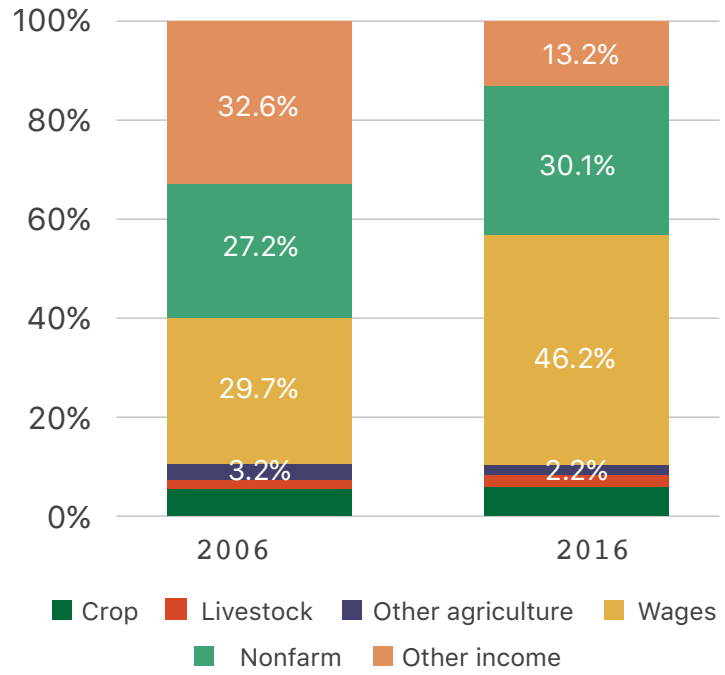


Source: Estimations from VHLSSs.

3.2.4. Decomposition of inequality by source of living standard indicator

We classify the total income of households into crop income, livestock income, farm income from other sources, wages, non-farm business income, and other non-farm income sources, such as private and public transfers. In Figure 3.11, we decompose total inequality, which is measured by the Gini index of per capita income, into the inequality components of income sources (using the formula in Equation 5). It shows that inequality in wages accounts for the largest share, at 46.2%, in total inequality in 2016. Inequalities in non-farm business income and other non-farm income account for 30.1% and 13.2% of total inequality, respectively. Farm income contributes little to total inequality. Over the 2006-2016 period, the share of inequality in wages in total inequality tended to be larger. This means that the proportion of wages in total income and the variation in wages have increased over time.

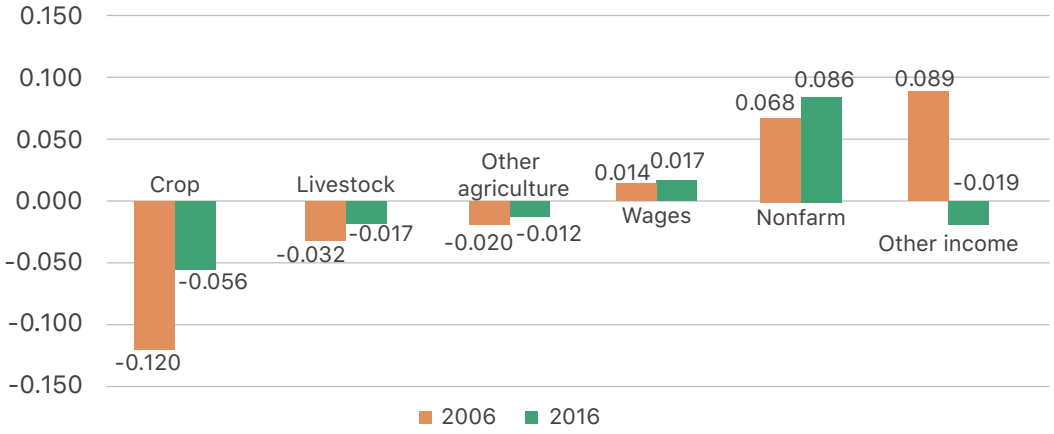
Figure 3.11. Contribution of income sources to income Gini (in percent)



Source: Estimations from VHLSSs.

Figure 3.12 estimates the elasticity of total income inequality to income sources using the formula in Equation 6. Households with high wages and non-farm business income have a higher income than those with low wages and non-farm business income. Thus, an increase in wages and non-farm business income will increase total inequality. Specifically, a one-percent increase in wages and non-farm income for all households increases total inequality by 0.017% and 0.068%, respectively. On the other hand, households with more farm income tend to be poorer than households with low farm income. Thus, increasing farm income will reduce inequality. It should be noted that this elasticity approach assumes that only one income component changes, while others remain fixed. Thus, increasing farm income can reduce inequality. However, a better approach to reduce inequality is to move farm households to non-farm sectors, so that they can increase their income proportionally more than non-farm households.

Figure 3.12. Elasticity of Gini to income sources (in percent)

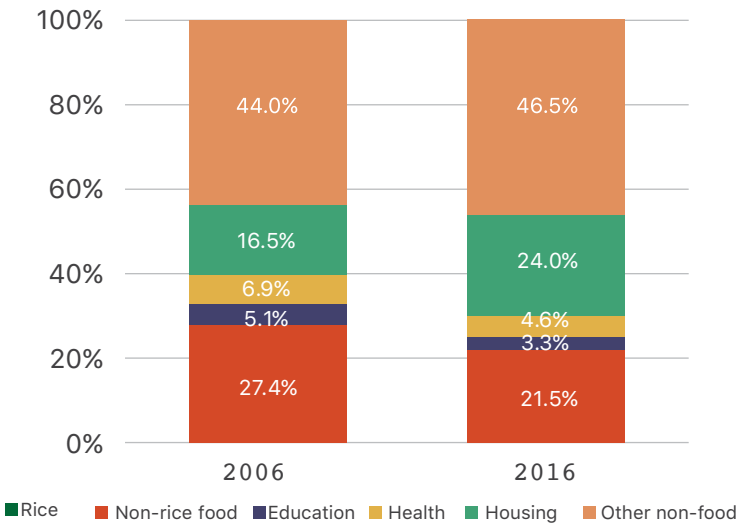


Note: this figure reports the decomposition of inequality measured by the Gini index of per capita expenditure into inequality by income source.

Source: Estimations from VHLSSs.

We also analyse the inequality in consumption items and see how they contribute to total inequality (Figure 3.13). The total expenditure of households is divided into rice consumption, other food consumption, education, health, housing consumption, and other non-food consumption. The figure shows that inequalities in other non-food consumption and housing contribute the most to total inequality. Non-rice food consumption also contributes largely to total inequality. Inequality in spending in education and health accounts for a small proportion of total inequality. It should be noted that the contribution of rice consumption inequality is very small, less than 1%, and because of the small magnitude, this does not appear in Figure 3.13

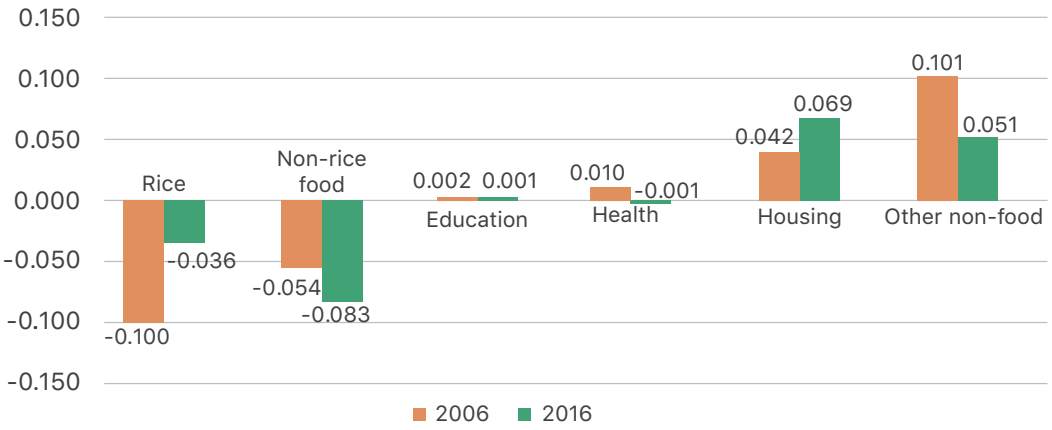
Figure 3.13. Contribution of expenditure items to expenditure Gini (in percent)



Source: Estimations from VHLSSs.

Figure 3.14 presents the elasticity of total inequality to the change in expenditure items. The increase in housing expenditure and non-food expenditure increases total inequality, while the increase in rice expenditure and non-rice food expenditure reduces total inequality.

Figure 3.14. Elasticity of Gini to expenditure items (in percent)



Source: Estimations from VHLSSs.

To sum up, the literature review establishes that the main losers of inequality tend to be the poorest and ethnic minorities. Meanwhile, the winners tend to be the richest and the groups with the highest education level. Compared with previous work, this study makes several contributions. It explores what the situation of inequalities is in three domains that are health, education, and participation through both quantitative and qualitative analysis. Then, the study aims to determine which groups suffer most from inequalities in each domain, apart from the losers and winners mentioned in other research.

CHAPTER

4/7

INEQUALITIES IN LIFE AND HEALTH

People need to benefit equally from access to quality health services, medical advances in the treatment of disease, should the need arise, and to be protected from communicable diseases

The capability to be alive, enjoy longevity, and avoid premature death is an important life domain. As the Constitution of the WHO states, "health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition."

In addition to the capability to be alive, enjoy longevity, and avoid premature death, this domain covers ***health inequalities across physical and mental health outcomes***. Inequality in premature death refers to instances of death as a result of violation of and infringement on people's safety and security, or of unequal exposure to natural disasters, climate change, and other environmental factors. The capability to live a healthy life is affected by biological, physical, and mental factors, economic resources, and social conditions in the environment. The unequal distribution of income and poor living conditions can play an important role in shaping health inequalities. One of the main causes of premature death is disease. Inequalities exist due to differences in exposure (also affected by poor living conditions), lifestyle factors, and differences in medical treatment. People need to benefit equally from access to quality health services, medical advances in the treatment of disease, should the need arise, and to be protected from communicable diseases.

Due to the limitation of data, we cannot measure all the indicators suggested in the MIF. Therefore, we have selected a number of important indicators for which data are available in Vietnam and have gathered them into categories: "Health status and treatment," "Life expectancy and mortality rates," and "Healthy life". We measure inequality in these indicators by comparing their means between different population subgroups disaggregated by gender, ethnic group, education level, poverty, expenditure and wealth quintile, urban/rural area, and geographic region. After the analysis of these indicators, the chapter concludes with "Drivers of inequalities in health".

4.1. HEALTH STATUS AND TREATMENT

Percentage of people getting sick in the past 12 months

Table 4.1. Proportion of sick people in the past 12 months by demographic and regional characteristics (%)

Groups	% sick in the past 12 months		Number of illness experienced in the past 12 months	
	VHLSS 2014	VHLSS 2016	VHLSS 2014	VHLSS 2016
Gender				
Male	5.50	7.40	1.53	1.86
Female	6.60	8.00	1.65	2.02
Ethnicity				
Ethnic minorities	7.05	6.95	1.66	1.71
Kinh	5.89	7.86	1.58	1.99
Ethnic groups				
Kinh	5.89	7.86	1.58	1.99
Tay	7.80	6.64	2.35	2.01
Thai	7.58	8.42	1.40	1.77

Groups	% sick in the past 12 months		Number of illness experienced in the past 12 months	
	VHLSS 2014	VHLSS 2016	VHLSS 2014	VHLSS 2016
Khmer	6.74	6.95	1.78	1.64
Muong	9.76	8.30	1.41	1.96
Nung	5.82	7.31	1.46	1.54
H'Mong	4.48	4.43	1.16	1.33
Dao	7.20	6.47	1.21	1.36
Others	6.78	6.89	1.74	1.69
Urban/rural areas				
Rural	6.61	7.22	1.61	1.77
Urban	5.01	8.73	1.56	2.25
Regions				
Red River Delta	5.85	6.65	1.57	1.62
Midlands and Northern Mountains	7.14	6.65	1.53	1.61
Northern and Coastal Central	7.07	7.50	1.59	1.72
Central Highlands	7.05	6.41	1.71	1.64
Southeast	4.29	12.86	1.73	2.64
Mekong Delta	5.76	6.03	1.56	1.83
Total	6.07	7.70	1.60	1.94

Source: Estimations from VHLSSs.

The percentage of people getting sick and their number of bouts of sickness in the last 12 months were calculated by the research team based on the data of the most recent 2-year Living Standards Survey, 2014 and 2016 (Table 4.1). The sickness data in the Living Standards Survey was based on the survey respondents' self-assessment of their health status. According to the definition of the Living Standards Survey, sickness/illness/injury includes diseases that have been diagnosed by health facilities or have not yet been diagnosed, but have manifestations such as cough, fever, diarrhoea, pain, inflammation, vomiting, colds or pregnancy complications, poisoning, burns causing extensive damage, etc.; traffic accidents, labour accidents, fights, falls, animal biting/knocking/kicking, etc.

In general, there was not much difference in the percentage of people getting sick and the number of bouts of sickness between men and women, urban and rural areas, ethnic minorities and the Kinh. Among ethnic minority groups, notably, the Muong had the highest incidence of sick people, nearly twice that of the H'Mong (the lowest one). This difference may be due to the customs and living habits of each ethnic group affecting their health situation. By region, the Southeast region recorded the lowest rate of sick people (4.3%) among 6 regions in 2014, but by 2016, this rate had tripled to 12.9%, the highest among regions. Meanwhile, the other regions have not changed much in the past 2 years, at 6-7%.

Table 4.2. Proportion of sick people in the past 12 months by social-economic characteristics (%)

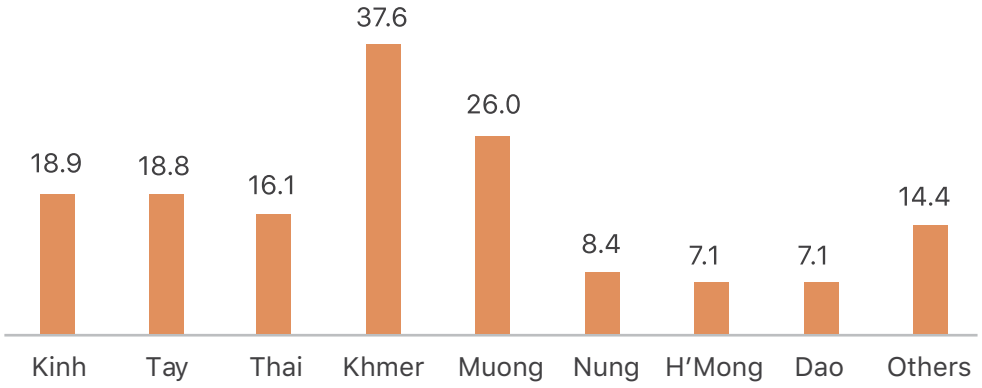
Groups	% sick in the past 12 months		Number of bouts of sickness in the past 12 months for sick people	
	VHLSS 2014	VHLSS 2016	VHLSS 2014	VHLSS 2016
Education of hh. Head				
Less than primary	7.13	8.30	1.63	1.97
Primary education	5.97	7.18	1.62	1.89
Lower secondary education	5.72	7.68	1.70	1.79
Upper secondary education	6.11	8.05	1.44	2.15
Post-secondary education	4.35	6.99	1.40	2.07
Poverty status				
Non-poor	6.08	7.91	1.58	1.98
Poor	5.98	5.88	1.72	1.53
Expenditure quintiles				
Poorest	5.94	5.89	1.67	1.65
Near poorest	6.04	7.15	1.60	1.92
Middle	6.24	6.82	1.47	1.71
Near richest	5.93	8.68	1.63	1.99
Richest	6.19	9.98	1.62	2.26
Total	6.07	7.70	1.60	1.94

Source: Estimations from VHLSSs.

In terms of education level, the percentage of people getting sick and their number of bouts of sickness in the past 12 months was not significantly different (Table 4.2). Comparing the health status by expenditure group shows that the rich self-assess that their health status is weaker than the poor. It is easy to recognize an upward trend in the percentage of people getting sick in the rich group (2014: 6.2% and 2016: nearly 10%). At the same time, this percentage for the poor was almost unchanged, nearly 6%, always lower than the rich group. The data on health assessment seems subjective since it is based on respondents' statements; however, it still reflects the difference in the concept of health status between the rich and the poor.

Number of sick days

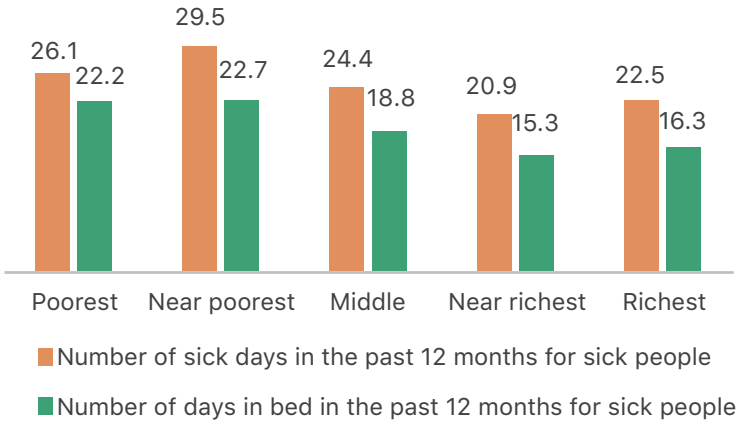
Figure 4.1. Number of sick days in the last 12 months by ethnic group, 2016 (days)



Source: Estimations from VHLSSs.

Figure 4.1 presents data on the number of sick days in the last 12 months by ethnic group. The Khmer reported the highest number of sick days among the ethnic groups surveyed (37.6 days), followed closely by the Muong (26 days). The Kinh, Tay, and Thai had an average number of sick days (16-19 days). Meanwhile, the Dao and H'Mong reported the fewest sick days compared to the other ethnic groups, 7.1 days. The other groups had an estimated 14 days of sickness in the past year, but since the data included ethnic groups with an observation sample smaller than 100, they were not representative in comparison.

Figure 4.2. Number of sick days in the last 12 months by expenditure quintile (days)

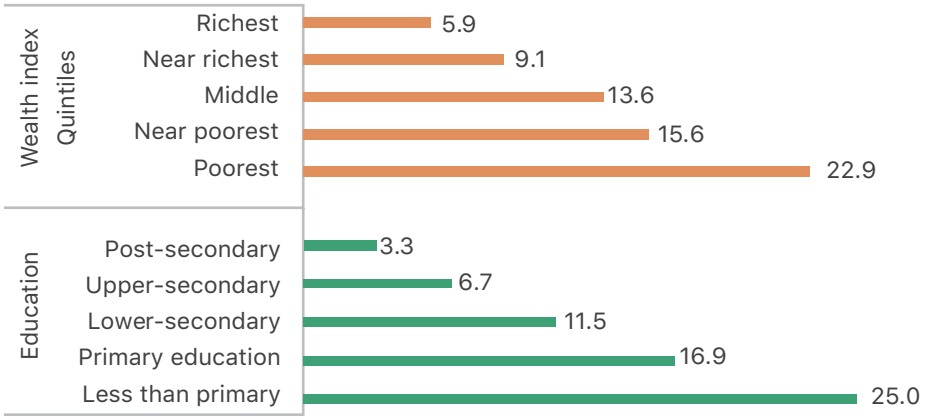


Source: Estimations from VHLSSs.

Figure 4.2 shows the number of sick days in the last 12 months by expenditure group. Group 2 had the highest number of sick days (29.5 days) and hospital-bed days (22.7 days), while Group 4 reported the lowest number of sick days (20.9 days) and hospital-bed days (15.3 days). There were no significant differences among the remaining groups.

Prevalence of disability

Figure 4.3. Prevalence of people with disabilities (%)



Source: Estimations from the 2018 PAPI survey.

Figure 4.3 shows the estimated percentage of disability by the research team from the PAPI Survey 2018. People with disabilities in this survey are understood to have difficulty (i) talking to others (not due to different languages), (ii) memory or concentration, (iii) walking or going up/down stairs, (iv) listening, even when wearing hearing aids, and (v) seeing, even when wearing glasses. The results show a significant difference in the proportion of people with disabilities by education level and expenditure group.

In particular, in terms of education, the non-degree group has the highest percentage of people with disabilities (25%), more than 7 times the group of professional high school, college/university, or higher level. This also shows that the percentage of disability tends to be higher in the low-education group. Due to disability, the ability to learn and perceive is adversely affected, which makes it hard to study at higher education levels. Then, it may lead to implications for the development of the individual: the higher the risk of disability, the lower the school attendance ability may be. Without a high level of education, people with disabilities may have limited development opportunities for employment and income, and may even risk falling into the poor group.

When comparing disability percentages between expenditure groups, group 1 (the poorest) has the highest percentage of people with disabilities (22.9%), nearly 4 times higher than that in group 5 (the richest). It is noticeable that the risk of disability in rich households is lower than in poor households. Thus, there is an interaction between disability and poverty, in which disability is both a cause and a consequence of poverty. Disability may result from unhygienic and unsafe living conditions, and poor healthcare and nutrition. Disability is also a barrier for people with disabilities and their families to access basic social services, as well as life improvement opportunities. The impact of disability not only affects those suffering from it, but also other members of the household. Non-disabled household members often have to share the costs incurred for those with disabilities. In addition, people with disabilities may also require care from family members, which might influence the family's decisions about work, healthcare, education, and other activities.

Box 4.1. People with disabilities in poor households have limited access to healthcare and education opportunities

Although people with disabilities in poor households have received support from social protection policies and programmes, they still have difficulty accessing healthcare and education opportunities. In particular, they rarely have the economic means needed to be fully treated and cared for in health centres. In addition, people with extreme disabilities in needy households cannot afford special education programmes, or there are no appropriate education programmes in their area.

In Hung Loi Commune, Yen Son District, Tuyen Quang Province, over 70% of households are poor. In the last 10 years (2008-2018), according to commune statistics, the number of people with disabilities has increased nearly 5 times, from 11 to 51. As the representative of the commune health centre said, people with disabilities in the commune have not received much attention concerning treatment and rehabilitation. *"Currently, the group of people with disabilities has not been paid much attention by society; only the centre manages and cares about this issue. The number of people with disabilities is large in the commune; the treatment and rehabilitation activities have not been paid enough attention by households, making it difficult for the commune health centre."* (KII with the head of the health centre - Hung Loi Commune, Yen Son District, Tuyen Quang Province). Observations by the research team showed that the facilities of the health centre have not been well equipped to support the rehabilitation of people with disabilities. In addition, the treatment and rehabilitation of people with disabilities in poor households still face difficulties due to economic conditions that do not allow them to access large medical centres for examination when needed. Indeed, on top of the cost of the medical treatment, travel and accommodation costs during treatment is also a barrier for poor households with people with disabilities.

Not only do people with disabilities lack access to healthcare due to failing facilities and financial difficulties, but they also have limited access to education, especially their own special education programmes. According to the Vice Principal of the primary school in Hung Loi Commune, there is currently no programme for students with disabilities. *"There are no handicapped classes so that students with disabilities study in regular classes. [...]. They have slight disabilities; hence, they still study with normal students."* Or even with severe disabilities, people in poor households have absolutely no opportunity to attend school. In a discussion with a female group in An Hiep Commune, Chau Thanh District, Soc Trang Province, an 8-year-old boy's mother shared that her son had a congenital disability due to Agent Orange so that he could not go to school. She and her husband took turns at home to look after him. *"I go to work - he takes care of our son at home, I take care of him at home - my husband goes to work... If there is a river, my son will jump into it. If I let him go, he will run away immediately. My child always needs to be looked after."* (FGD - An Hiep Commune, Chau Thanh District, Soc Trang Province). The fact that children have congenital disabilities and that their families are not able to send them to school leaves them without access to education and the risk of continued poverty as adults.

Table 4.3. Proportion of people with disabilities by demographic and regional characteristics (%)

	Difficulty seeing	Difficulty hearing	Difficulty walking	Difficulty remembering	Difficulty communicating	Difficulty in any domain
Gender						
Male	0.15	3.01	4.56	5.84	1.19	9.76
Female	0.02	3.37	9.89	10.86	1.88	17.07
Ethnicity						
Ethnic minorities	0.27	5.08	10.05	11.31	2.97	16.93
Kinh	0.06	2.97	7.01	8.10	1.38	13.16
Urban/rural areas						
Rural	0.11	3.80	7.84	9.84	1.66	15.38
Urban	0.05	2.51	6.76	6.88	1.43	11.52
Region						
Red River Delta	0.10	2.25	5.31	5.41	0.94	9.79
Midlands and Northern	0.04	3.05	5.46	6.02	2.11	9.52
Northern and Coastal	0.07	4.29	8.97	10.20	1.83	16.72
Central Highlands	0.15	4.04	8.51	9.11	2.86	15.35
Southeast	0.10	2.89	9.22	9.04	1.40	15.81
Mekong Delta	0.06	3.22	6.87	9.48	1.50	13.55
Total	0.08	3.20	7.33	8.45	1.55	13.57

Source: Estimations from the 2018 PAPI survey.

Table 4.3 provides detailed information on disability percentages by demographic and regional characteristics. In the whole country, 13.57% of people have difficulty performing at least one of the 5 activities mentioned above. The percentages of people with disabilities in seeing, hearing, and communication activities is relatively low, below 5%. About 7.33% of people have trouble walking and 8.45% of people have memory difficulties.

By gender, the overall prevalence of disability among women (17.07%) is almost double that among men (9.76%). In particular, women tend to have difficulty in moving and in the ability to remember/focus. This may be explained by the fact that women, especially premenopausal and menopausal women, are more likely than men to suffer from osteoporosis due to biological characteristics. Bone mass will lose 2-4% per year and last for 10-15 years after menopause, resulting in osteoporosis (Magazine of Scientific and Technological Information of Quang Binh Province, 2018). Similarly, memory decline occurs more often in premenopausal and menopausal women compared to men of the same age, due to biological changes.

The disability prevalence of ethnic minority groups tends to be higher than that of the Kinh in all activities. In particular, disabilities in travelling and the ability to remember/focus occur more among ethnic minority groups than among the Kinh. In addition, the proportion of people with disabilities in rural areas is slightly higher than in urban areas for all types of disabilities. Among the regions, North Central and Central Coast, Central Highlands, and South East are the three with the highest proportion of people with disabilities (over 15%) compared to the other regions. The results also show that mobility and cognitive disabilities are the most common types of disability.

Table 4.4. Proportion of people with disabilities by social-economic characteristics (%)

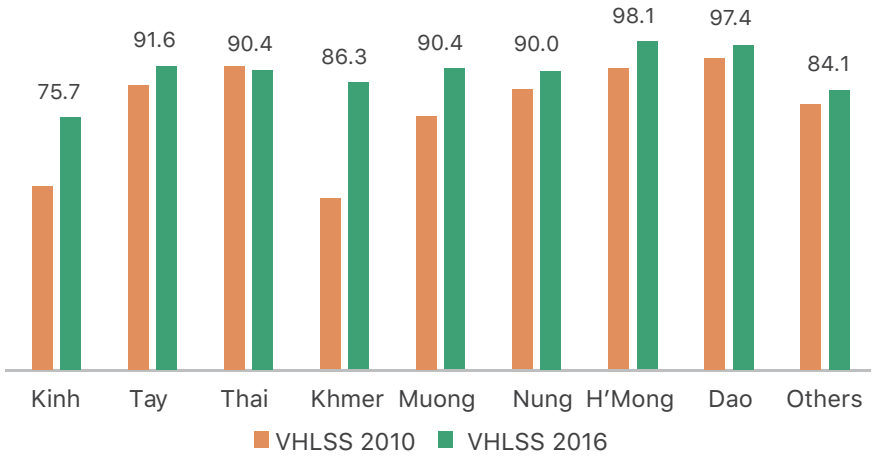
	Difficulty seeing	Difficulty hearing	Difficulty walking	Difficulty remembering	Difficulty communicating	Difficulty in any domain
Education						
Less than primary	0.09	6.49	14.80	17.33	3.52	25.01
Primary education	0.08	3.78	8.39	11.08	1.95	16.91
Lower secondary	0.14	2.70	6.04	6.11	1.16	11.51
Upper secondary	0.02	1.28	3.58	3.73	0.51	6.70
Post-secondary	0.00	0.73	2.05	1.74	0.19	3.26
Poverty						
Non-poor	0.07	2.91	6.90	7.84	1.33	12.78
Poor	0.16	6.45	12.13	15.24	4.06	22.31
Wealth Index Quintiles						
Poorest	0.18	6.42	12.30	15.70	3.32	22.91
Near Poorest	0.05	3.93	8.05	9.29	2.06	15.63
Middle	0.06	2.63	7.35	8.53	0.79	13.60
Near Richest	0.09	2.00	5.61	4.50	1.15	9.08
Richest	0.04	0.83	3.08	3.68	0.41	5.88
Total	0.08	3.20	7.33	8.45	1.55	13.57

Source: Estimations from the 2018 PAPI survey.

Table 4.4 shows the percentage of people with disabilities by socio-economic characteristics, based on the research team's estimates from the PAPI Survey 2018. The results show that the percentage of people with disabilities without a degree is 25%, 7 times higher than for the group with college or university degrees or higher (3.26%). Compared to the non-poor group (12.78%), the percentage of people with disabilities in the poor group is nearly double (22.31%). In addition, among the types of disabilities, the poor are at higher risk than those from the non-poor group. Comparing living standard groups, group 1 (the poorest) also features the highest proportion of people with disabilities (22.91%), nearly 4 times more than that in group 5 (the richest). This partly reflects the fact that people with low levels of education seem to be at higher risk of being disabled by living in less secure environments or accessing poorer health services.

Percentage of people with health insurance

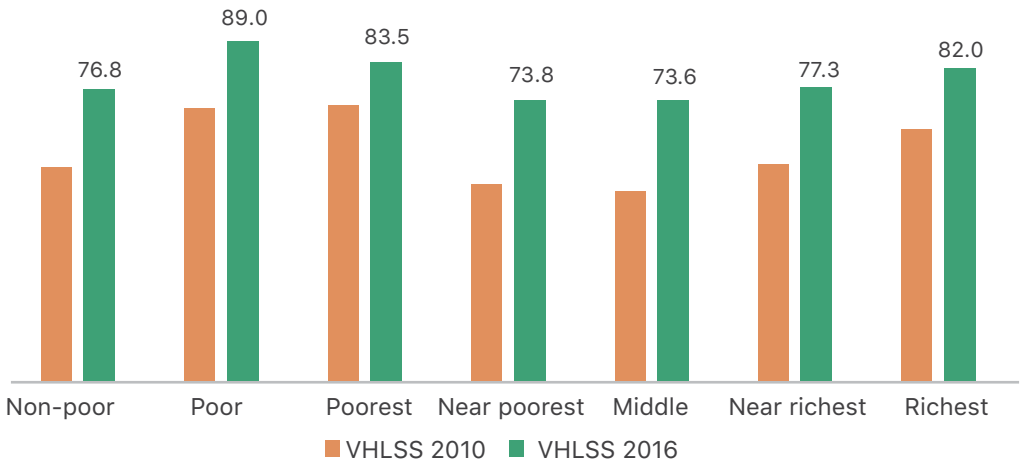
Figure 4.4. Proportion of people with health insurance by ethnic group (%)



Source: Estimations from VHLSSs.

The percentage of people with health insurance by ethnic group is shown in Figure 4.4. There are fewer Kinh and Khmer with health insurance than the rest of the ethnic groups in 2010. By 2016, except for the Kinh, other ethnic minority groups have a relatively high health insurance coverage (over 85%), the highest percentage being among the H'Mong and Dao, 98.1% and 97.4% respectively. This reflects the policy of issuing health insurance cards for ethnic minorities, which has increased the proportion of health insurance coverage in recent years.

Figure 4.5. Proportion of people with health insurance by expenditure quintile (%)



Source: Estimations from VHLSSs.

Figure 4.5 shows that the percentage of people with health insurance by expenditure group varies over the 2010-2016 period, based on the research team's estimates from VHLSSs. The results show that the poor have a higher percentage of health insurance than the non-poor, with a difference of more

than 12%. Specifically, group 1 (the poorest) has the highest percentage of health insurance (83.5%), followed by group 5 (the richest) with 82%. Groups 3 and 4 have health insurance rates below 78% and there is not much difference between these groups. It is noteworthy that the coverage of health insurance in group 2 (near poor) was the second lowest (73.8%). Thus, the health insurance policy has helped the poor to have more health insurance and increased their ability to access healthcare services. However, the near-poor group is most vulnerable in this policy in comparison to the other groups, so that they need further attention. In addition, the factors of location and quality of health facilities that have not been affected by the health insurance policy need to be considered more closely.

Box 4.2. Health insurance partially shares the health expenditure burden with the poor

Being a near-poor household in Hung Loi Commune, Yen Son District, Tuyen Quang Province, Mrs. Dieu's family consists of four people including herself, her husband, and two children. Mrs. Dieu's eldest daughter is studying at grade 12 and her son dropped out of school to take care of their buffaloes due to his illness. As her husband was mentally ill and jobless, she became the breadwinner in her family. Currenly, the household assets include 3 field slots, 3 buffaloes, and some chickens.

Previously, the main income sources of her household came from farming, selling chickens and pigs. Selling chickens and pigs helped her earn a small income. However, after the recent cholera epidemic, all the pigs which her family raised had to be sold and none were left. At present, her family's monthly income depends mainly on farming, about 1 million VND per month. However, she said this income is quite unstable, so that her household faces many difficulties. *"Sometimes, we don't have any money to go to the market to buy (food)."* Because they belong to a near-poor household, her children's tuition is reduced by 50%. If the income is divided into 10 parts, both educational and medical expenses account for 5-6 parts per month.

Mrs. Dieu has a bone and sinus-related disease, so she has monthly check-ups and medicine purchases. Thanks to the health insurance card, she can get her health check-up at the centre-level hospital rather than at the commune health centre, where the facilities are limited. The last time, she went to a provincial hospital and her health insurance card covered her medicine bill of nearly VND 400,000. This is a relatively large expense compared to her family's current monthly income (about 40%). One could consider that thanks to the health insurance card, the burden of her family's medical expenses is partially shared.

Table 4.5. Proportion of people with health insurance by expenditure quintile (%)

	VHLSS 2010	VHLSS 2012	VHLSS 2014	VHLSS 2016
Gender				
Male	59.5	63.8	68.7	76.8
Female	59.6	65.0	70.8	79.2
Education of hh. head				
Less than primary	58.9	62.9	68.1	76.7
Primary education	54.0	59.6	66.0	73.4
Lower secondary education	54.6	60.3	65.3	76.6
Upper secondary education	65.3	69.5	74.8	81.4
Post secondary education	84.2	87.1	89.6	92.4
Poverty				
Non-poor	56.4	61.7	67.6	76.8
Poor	71.6	77.4	83.7	89.0
Urban/Rural areas				
Rural	57.9	63.0	68.3	77.6
Urban	63.5	67.5	72.7	78.9
Region				
Red River Delta	59.1	63.1	68.7	75.8
Midlands and Northern	77.2	80.7	83.5	87.6
Northern and Coastal	61.2	68.6	72.5	82.0
Central Highlands	65.8	64.6	66.8	75.5
Southeast	56.2	59.5	67.9	75.1
Mekong Delta	46.6	53.5	61.2	72.1
Total	59.6	64.4	69.8	78.0

Source: Estimations from VHLSSs.

Table 4.5 shows a significant increase in the percentage of people with health insurance over the years 2010-2016 by gender, education level of household head, area, and region. Overall, according to the estimates by the research team, the percentage of people with health insurance among both men and women increases from about 59% (in 2010) to over 75% (2016). However, there is not much difference in the percentage of health insurance coverage between men and women. Between urban and rural areas, there is a slight difference (63.5% and 57.9% respectively) in 2010, but by 2016, the difference between these two areas is not significant (78.9% and 77.6% respectively).

Meanwhile, there is a positive correlation between the educational attainment of the household head and the percentage of health insurance. Specifically, the percentage of health insurance in households where the head holds a college or university degree is 92.4%, while that of households where the head has no education is only 76.7%. By region, the Northern Midlands and Mountains feature the highest

proportion of health insurance (87.6%), followed by the North and South-Central Coast (82%). The remaining regions do not display much difference, about 72-75%.

Although the percentage of people with health insurance increases rapidly, that of medical examinations and treatment using health insurance cards is not high, especially for ethnic minorities. Specifically, the average percentage of ethnic minorities using health insurance cards is only 44.8%, of which the Muong have a use rate of only 32% (UNDP & CEMA, 2015). The use of health insurance cards partly reflects the proportion of ethnic minorities going to health facilities for medical examinations and treatment. This situation is due to (i) people only going to the commune health centre or the district/province level when the disease has become severe, (ii) the partial understanding of the benefits and the way to use the health insurance card, and (iii) difficult economic conditions resulting in limited access to transport facilities when the distance to medical facilities is too great (UNDP & CEMA, 2017).

Box 4.3. Health insurance cards are used in case of a serious illness and/or high costs

According to the regulations, people with health insurance cards in general and near-poor, poor, and ethnic minority households in particular are helped in their access to medical and healthcare services by the use of health insurance cards. Although the proportion of people with health insurance is relatively high, the proportion of people using it is low, especially for ethnic minority groups. The indicator of the proportion of people using health insurance cards somewhat reflects the proportion of ethnic minorities going to health facilities for medical examinations and treatment. During a group discussion with people in 3 communes of the 3 provinces of Tuyen Quang, Dak Lak, and Soc Trang, the research team asked the question: In which case, would they use the health insurance card? Most participants of the FGDs said that they would use their health insurance cards in case of serious illness to reduce the cost burden.

As a commune belonging to Region III, Hung Loi Commune, Yen Son District, Tuyen Quang Province, has more than 70% of poor households and 98% of the population are ethnic minorities. With the health insurance card, the poor and ethnic minorities receive support for medical examinations and hospital costs. Therefore, they often use the health insurance card when going to the doctor to reduce the worry of expenses. *"If you go with the card, you can get a 70% discount. It really helps,"* or *"Now without insurance, the people here are stuck. The insurance already covers the cost of hospital visits; we just pay for the food"* (Female FGD - Hung Loi Commune, Yen Son District, Tuyen Quang Province).

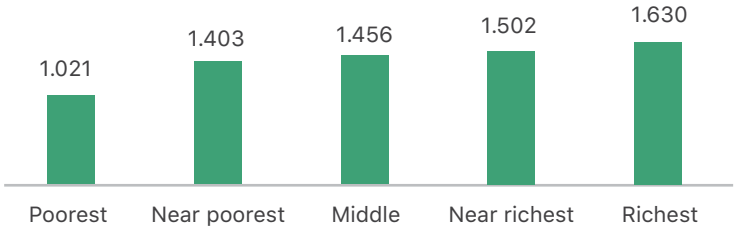
In An Hiep Commune, Chau Thanh District, Soc Trang Province, over 60% of the population is Khmer and all are entitled to the health insurance card. The examining process of the research team in the commune showed that people would not use health insurance cards if they were not seriously ill. *"I use the card only if I have an illness," or "If the illness is quite serious, I will go to the hospital, I use insurance"* (Female FGD - An Hiep Commune, Chau Thanh District, Soc Trang Province). If there are only signs of slight illness, instead of going to the healthcare centre or the district/provincial hospital, people will buy medicine themselves. *"Cold, runny nose, headache, I just run out to buy 1-2 doses, for only 6-8 thousand dongs; it takes less effort than to wait,"* or *"Sometimes I buy medicine outside to take it"* (Male FGD - An Hiep Commune, Chau Thanh District, Soc Trang Province).

In Quang Hiep Commune, Cu M'gar District, Dak Lak Province, with 25% of the population belonging to ethnic minorities, if people consider that they have a minor illness, they do not use health insurance cards. Instead, they go to a private hospital for faster medical treatment. *"Depending on the case, mild illness is also less money. If you get seriously sick, you should use insurance because it costs a lot of money. So we go to the hospital when we are seriously sick and we go private when we are mildly ill"* (Male FGD - Quang Hiep Commune, Cu M'gar District, Dak Lak Province).

Thereby, it appears that one of the reasons that the beneficiaries of health insurance cards, such as the poor and ethnic minority groups, use the card when they get seriously ill and need to pay large amounts of money. In addition, the concept of minor versus serious illness among the poor and ethnic minority groups also contributes to the way they use health insurance cards.

Number of health visits

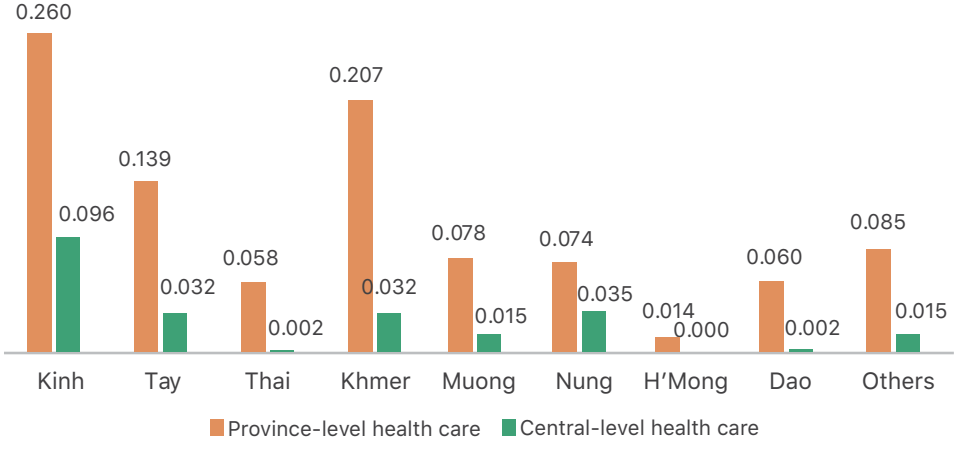
Figure 4.6. Number of annual healthcare visits by expenditure quintile in 2016



Source: Estimations from VHLSSs.

Figure 4.6 provides information on the number of healthcare visits by expenditure group in 2016. The research team found that the wealthiest group had more healthcare visits than the poor group. In particular, group 5 (the richest) has the highest number of visits (1.6 times), while group 1 (the poorest) visits 1.02 times.

Figure 4.7. Number of annual healthcare visits in province-level and central-level hospitals by ethnic groups in 2016



Source: Estimations from VHLSSs.

Figure 4.7 shows the number of annual medical visits estimated by the research team from the 2016 VHLSS, by ethnic group, hospital level, and expenditure group. It is evident that the average numbers of annual medical visits by ethnic groups in provincial and central hospitals are very low. In particular, although the Kinh and the Khmer are the two groups visiting a provincial hospital with the highest rate, the numbers of visits are respectively 0.26 and 0.2 times only. The H'Mong feature the lowest average number of visits per year, 0.014 times. Ethnic groups such as the Thai, Muong, Nung, and Dao also fall into the group with very few annual medical visits, around 0.06-0.07 times.

For central hospitals, the Kinh is still the group with the highest average number of medical visits, 0.096 times. The number of visits by the Nung at this hospital level comes second (0.035). Meanwhile, no one among the H'Mong go to this hospital level, followed by the Dao, with 0.002 times. The low number of medical visits is due to a number of factors related to awareness, affordability, and the location of the hospital. As presented in Box 4.2, the concept of mild or severe illness affects people's decisions to go to a clinic. In addition, due to traditional customs, some ethnic groups such as the H'Mong often live in high mountains and difficult terrain, away from educational and medical facilities. This also affects how often they see the doctor.

Box 4.4. The poor and ethnic minorities rarely visit healthcare centres annually

Poor people tend to visit healthcare centres when their health status get worse. Due to some factors relatd to their awarness about their health status (perception of sickness), their affordability and others related to the healthcare centres such as quality, transportation, the number of visits to healthcare centres is less than that of the rich. The similar situation takes place among ethnic minority groups. Particularly, ethnic minority groups are likely to visit healthcare centres less than Kinh group.

In the discussions with the local male and female groups, the research team asked questions about the number of visits to the healthcare centre in the past year. The results of the discussions showed that the number of visits in the past year was very small, 1-2 times or zero. In the case of people who did not go to a clinic, they went to a pharmacy to buy medicine at a cheaper price. For serious illnesses, they went to a health centre to get medicine or visited district/provincial hospitals.

"Going out to buy (medicine). It only costs a few thousand dongs."

"No examination anywhere."

"Generally, only 1-2 times a year, going to the commune health centre for a check-up, then taking the medicine. [...] I also went to the district hospital, when I had a stomach ache and I did not know what to do. "

(Male FGD - An Hiep Commune, Chau Thanh District, Soc Trang Province)

"Vietnamese people are like that, there's no need for medical examination; you just buy medicine when you get sick."

"I diagnose myself. I ask them to sell me the medicine. Patient cum doctor. For example, sell me red and white antibiotics"

(Female FGD - Quang Hiep Commune, Cu M'gar District, Dak Lak Province).

Another reason why poor households and ethnic minority groups do not regularly have their health check-up as regularly as rich households is due to their disadvantaged economic condition. Then, they spend most of their time working and little visit healthcare centres. In addition, apart from healthcare expenses, other costs such as transportation, food and drink would affect their decisions.

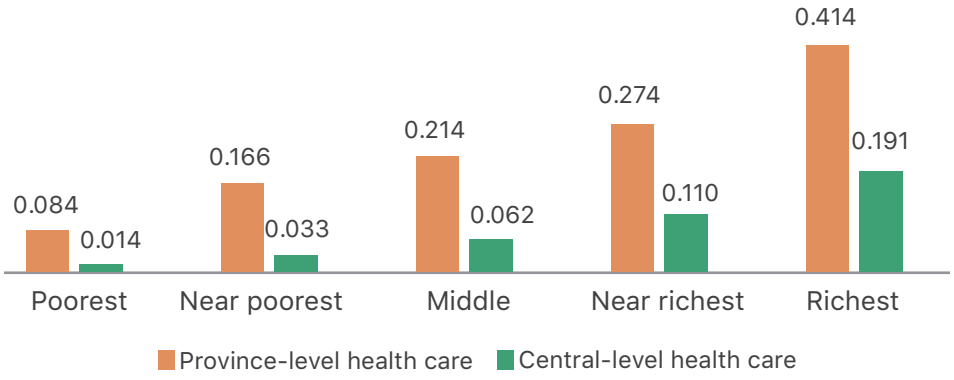
"Mainly because they have to work, earn money, they rarely go to the doctor; only when they are seriously ill will they visit them."

(KII with Head of Health Centre - Quang Hiep Commune, Cu M'gar District, Dak Lak Province)

"Many rich households care their health better and they could go to big healthcare centres to have their screening of some potential diseases. In addition, the costs of going to these healthcare centres, food and accommodation are expensive, which prevents disadvantaged people from their health check-up when they are in a need."

(KII with Head of Health Centre - Hung Loi Commune, Yen Sown District, Tuyen Quang Province)

Figure 4.8. Number of annual healthcare visits in province-level and central-level hospitals by expenditure quintile in 2016

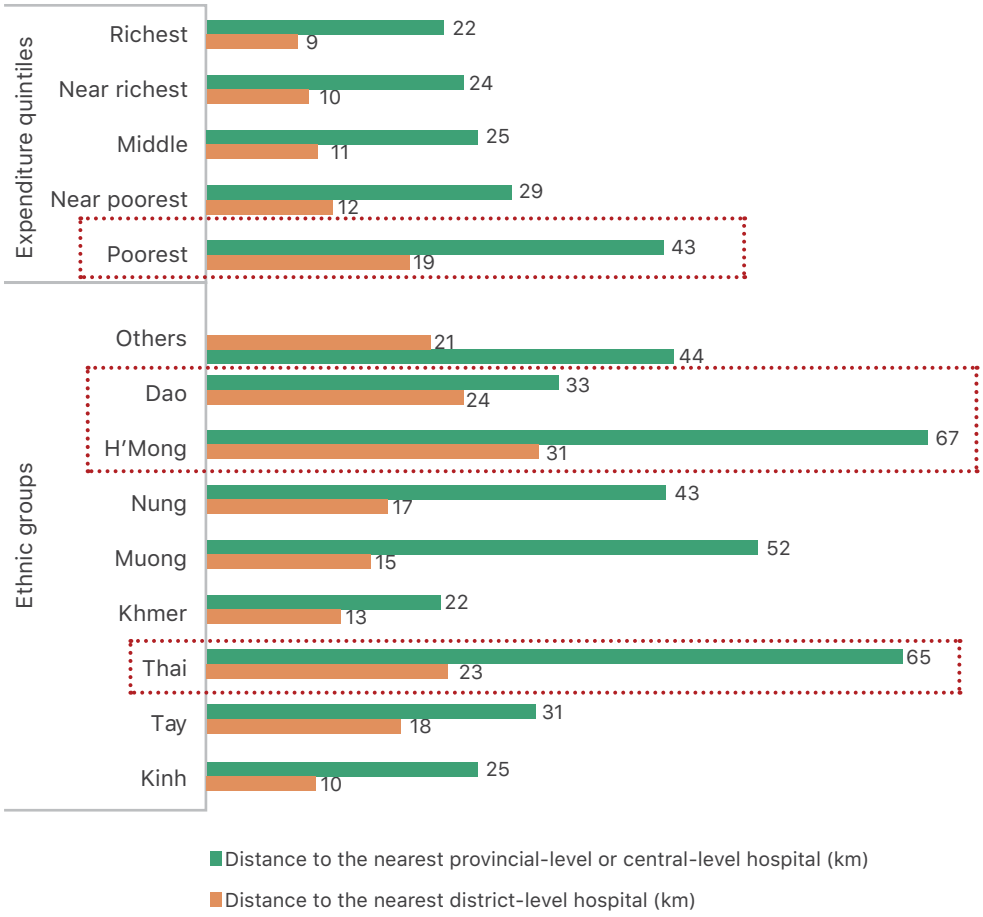


Source: Estimations from VHLSSs.

The number of visits at provincial and central hospitals by expenditure group is shown in Figure 4.8. Similar to the results in Figure 4.7, the rich group has more visits to both provincial and central hospitals than the poor group. In particular, group 5 (the richest) has 0.414 visits at provincial hospitals, 5 times higher than group 1 (the poorest). For central hospitals, the number of visits of group 1 (the poorest) is 0.014 times, 13 times less than that of group 5 (the richest).

Distance from the village to the nearest hospital

Figure 4.9. Distance from the village to the nearest hospital in 2016 (km)



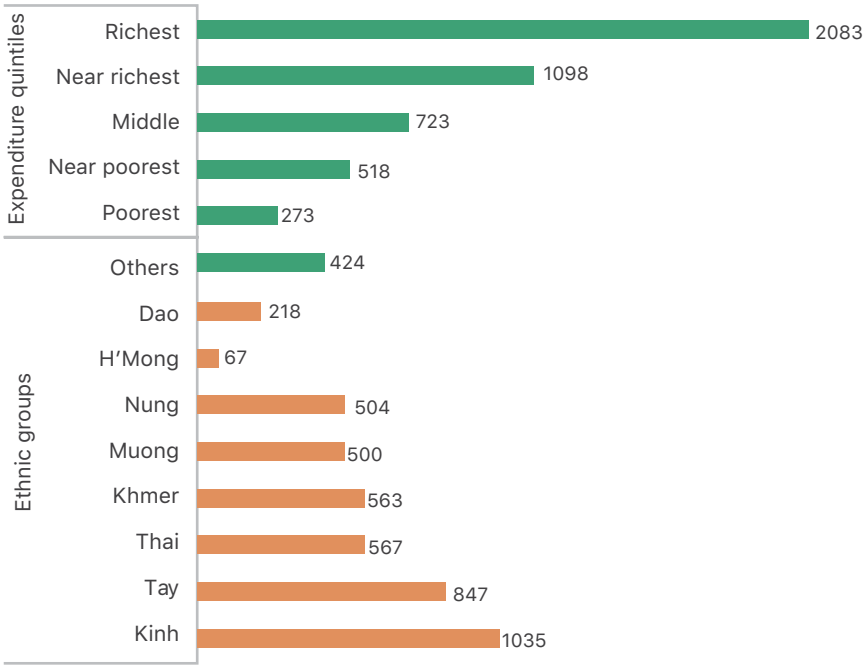
Source: Estimations from VHLSSs.

The results presented in Figure 4.9 show that there is a clear difference in the distance from home to the hospital between ethnic groups and expenditure groups. Among ethnic groups, the Kinh and the Khmer belong to the group with the smallest distance to the district, provincial, or central hospitals. The H'Mong, Dao, and Thai have the farthest distance from their home to the district hospital, from 23km to 31km. For provincial or central hospitals, the distances from H'Mong, Thai, Muong, and Nung homes go from over 40km to less than 70km. This can be explained by the distribution of these ethnic groups in mountainous areas. In particular, the H'Mong often live in high mountains, so the distance from their homes to the hospital is relatively great. Living away from health facilities is one of the reasons leading to limited access to healthcare services for these ethnic groups.

Comparing expenditure groups, group 1 (the poorest) has to travel twice as long to district, provincial, or central hospitals than group 5 (the richest). There is no significant difference between groups 2, 3, and 4. Thus, when the poor live farther away from health facilities than the rich, they have more difficulties going to a health examination and accessing other health services.

Annual out-of-pocket expenditure on healthcare

Figure 4.10. Annual out-of-pocket expenditure on healthcare (thousand VND), 2016



Source: Estimations from VHLSSs (data is available for rural areas only)

According to estimates by the research team based on the 2016 VHLSS in rural areas (Figure 4.10), annual out-of-pocket spending on health differs significantly between ethnic groups and between living standards. The Kinh spend the most on healthcare, with VND 1,035,000 in 2016, more than 15 times the health expenditure of the H'Mong. The Tay come second (VND 847,000), followed by the Thai, Khmer, Muong, and Nung. The Dao rank the second lowest with VND 218,000. By expenditure group, group 5 (the richest) spends over VND 2,000,000 per year, 7 times more than group 1 (the poorest). Just half of that amount, nearly VND 1,100,000, is out-of-pocket health expenditure for group 4 (near-rich). Thus, there is a big gap between the rich and the poor in out-of-pocket spending on health.

Box 4.5. The H'Mong spend less on health than others

One reason explaning why the H'Mong's out-of-pocket health expenditure is the lowest among EM groups is the long distance between their homes and health facilities. The H'Mong typically live at high altitudes in the northern mountainous provinces. As previously mentioned, the H'Mong have the farthest distance from their homes to district and provincial/central hospitals. According to an UNFPA report (2008), in order to get to the commune health centre, many H'Mong people have to walk along rocky, steep roads for half a day or more. In an emergency, motorbikes are a luxury vehicle. As a result, the remote areas they live in and the difficult access roads have created barriers for medical examination and treatment, resulting in less spending on health.

In addition to factors such as geographical distance to health facilities and lack of

transport infrastructure, Toan et al. (2002) indicate that expensive medical costs such as travel costs to the treatment facility also discourage EM groups, including the H'Mong who rarely visit health clinics, as they are one of the EM groups with the highest poverty rate. While health insurance cards may allow sharing the burden of medical expenses, daily travel and accommodation expenses (for patients and their family members) are such a burden that many people cannot afford them. Thus, this factor indirectly limits their out-of-pocket health expenditure.

Besides, the perception of illness or severity of illness (as previously mentioned) also affects the number of health visits by group, including the H'Mong with the least number of health visits. The H'Mong use a variety of methods for the prevention and treatment of diseases such as herbal remedies, magic, or food and health taboos (UNFPA, 2008). If these methods prove ineffective, they progress to treatment at health facilities. Last not but least, the decision to engage with the health services at health facilities in H'Mong households is usually made by husbands, mothers-in-law, or senior family members (UNFPA, 2017). Therefore, when female members of H'Mong households want to seek treatment at health facilities, their voices are not heard. Thus, the out-of-pocket expenditure of this EM group is also affected by these phenomena.

Table 4.6. Catastrophic health expenditure 2016

Groups	Average share of healthcare in total consumption expenditure (%)				Proportion of people living in households with a share of healthcare larger than 10% (%)			
	VHLSS 2010	VHLSS 2012	VHLSS 2014	VHLSS 2016	VHLSS 2010	VHLSS 2012	VHLSS 2014	VHLSS 2016
Ethnicity								
Ethnic minorities	3.2	2.4	3.4	3.3	8.0	4.4	8.4	7.6
Kinh	4.7	4.3	4.4	4.6	12.9	10.8	10.5	11.7
Ethnic groups								
Kinh	4.7	4.3	4.4	4.6	12.9	10.8	10.5	11.7
Tay	3.0	3.4	4.1	3.8	6.8	8.4	11.8	7.8
Thai	3.6	2.1	4.3	4.2	10.9	1.9	12.8	11.5
Khmer	4.2	3.0	4.6	4.1	10.0	4.4	14.1	9.3
Muong	4.0	3.3	3.1	3.8	9.2	8.1	6.7	11.9
Nung	2.7	2.1	3.9	4.0	4.9	4.4	8.9	9.9
H'Mong	1.3	1.4	1.2	1.3	1.9	1.6	0.5	1.1
Dao	2.0	1.9	3.3	2.2	4.8	4.2	11.5	5.2
Others	3.3	2.2	3.0	3.2	8.8	3.4	5.5	6.3
Education of hh. Head								
Less than primary	4.7	4.3	4.4	4.6	12.8	10.7	11.7	11.8
Primary education	4.9	4.3	4.5	4.6	13.3	11.1	10.8	11.1

Groups	Average share of healthcare in total consumption expenditure (%)				Proportion of people living in households with a share of healthcare larger than 10% (%)			
	VHLSS 2010	VHLSS 2012	VHLSS 2014	VHLSS 2016	VHLSS 2010	VHLSS 2012	VHLSS 2014	VHLSS 2016
Lower secondary education	4.5	4.1	4.5	4.6	12.7	10.2	10.7	11.9
Upper secondary education	4.1	3.5	3.9	4.3	10.3	8.0	8.5	10.4
Post-secondary education	3.4	2.7	2.9	3.1	8.5	5.1	5.9	6.7
Expenditure quintile								
Poorest	3.6	3.2	3.8	3.9	8.9	7.3	8.9	10.5
Second	4.7	4.2	4.5	4.6	12.5	11.1	10.3	11.6
Middle	5.2	4.3	4.6	4.4	15.4	10.5	11.6	10.2
Fourth	4.8	4.2	4.3	4.6	13.2	10.8	10.8	12.1
Richest	4.2	4.0	4.0	4.5	10.7	9.2	9.2	10.5
Rural/urban								
Rural	4.8	4.2	4.6	4.8	13.6	10.5	11.6	12.5
Urban	3.8	3.6	3.4	3.6	8.6	8.1	7.3	7.7
Regions								
Red River Delta	4.7	4.3	4.8	4.9	13.8	11.2	11.3	13.0
Midlands and Northern Mountains	3.6	3.4	4.2	3.7	9.5	8.5	11.3	9.5
Northern and Coastal Central	4.6	3.8	4.0	4.4	11.3	9.1	8.9	10.7
Central Highlands	4.8	4.0	4.2	4.3	15.5	9.6	11.1	10.3
Southeast	4.1	3.1	3.1	3.3	9.8	5.9	6.0	6.7
Mekong Delta	5.0	5.0	4.7	5.3	13.6	13.1	12.8	13.8
Total	4.5	4.0	4.2	4.4	12.1	9.8	10.2	11.0

Source: Estimations from VHLSSs.

Table 4.6 shows the average health expenditure proportion to total household expenditure and catastrophic expenditure as estimated by the research team from VHLSSs. In particular, catastrophic expenditure is understood as the average health expenditure in excess of 10% of total household expenditure. The results show that the average proportion of health expenditure to total household expenditure has not changed much over the years. In addition, the proportion of households with health spending exceeding 10% of total household expenditure tends to decrease slightly over the period 2010-2016. Specifically, 12.1% of households are subject to a national disaster expenditure on healthcare in the whole country in 2010, while this rate is 11% in 2016. Notably, the proportion of Kinh households (11.7%) incurring catastrophic expenditure is higher than that of ethnic minority groups and 11 times higher than H'Mong households (1.1%) in 2016. The expansion of health insurance coverage has contributed to spreading the risk of unpredictable and potentially costly healthcare expenditure across the population (World Bank, 2019). It appears that group 1 (the poorest) is supported by the health insurance policy so that their OOP is relatively low among expenditure quintiles. However, group 2 (near-poor) are at risk of high out-of-pocket payment for health in comparison to other groups, while their coverage of health insurance is the second lowest (as previously mentioned). Despite their higher OOP, the other three groups are probably able to afford it.

In addition, catastrophic costs are related to the education level of the household head. Accordingly, the percentage of households that incur catastrophic health expenditure levels decreases with the higher education of the household head. Specifically, in 2016, the percentage of households with a household head without a degree which have health expenditures exceeding 10% of their total spending is 11.8%, 5.1 percentage points higher than households with household heads who hold college, university, or higher degrees. Among living standards groups, there is no significant difference in the proportion of households that incur catastrophic costs. However, during the period 2010-2016, the proportion of rich households incurring catastrophic costs does not change much, while that of poor households increases slightly, from 8.9% (2010) to 10.5% (2016). In addition, compared to 2010, the proportion of near-poor households incurring catastrophic expenses in 2016 decreases slightly by 0.9 percentage points, but remains at a relatively high level (11.6%). Compared to urban areas (7.7%), rural areas have a higher proportion of households incurring catastrophic expenses (12.5%). Among the regions, the Red River Delta and the Mekong River Delta are those with the highest percentage of households incurring catastrophic costs (13% and 13.8% respectively), double the percentage of the Southeast, the region with the lowest percentage (6.7%).

4.2. LIFE EXPECTANCY AND MORTALITY RATES

Inequality in life expectancy

Measure: Infant and under 5 mortality rates

Table 4.7. Infant and under-5 mortality rates (‰)

Groups	Infant mortality rate (per mille)		Under-5 mortality rate (per mille)	
	Year 2013	Year 2018	Year 2013	Year 2018
Gender				
Male	17.4	16.1	29.9	27.8
Female	13.2	12.2	15.8	14.5
Urban/rural areas				
Rural	18.3	17.1	27.5	25.7
Urban	8.9	8.3	13.3	12.6
Region				
Red River Delta	12.2	11.2	18.3	16.8
Midlands and Northern	23.2	21.4	35.2	32.5
Northern and Coastal	17	15.8	25.5	23.7
Central Highlands	26.1	23.6	39.8	35.8
Southeast	9.1	8.2	13.5	12.4
Mekong Delta	12	10.9	17.9	16.3
Total	15.3	14.2	23.1	21.4

Source: Statistical Year Book from General Statistics Office

The Infant Mortality Rate (IMR), which is a measure of child mortality in the first year of life, reflects the quality of maternal and child healthcare services, evaluates the mortality of the high-mortality population group, and has a strong impact on life expectancy at birth. Table 4.7 shows the infant mortality rate between 2013 and 2018. The IMR of Vietnam in 2018 is 14.2 deaths per 1,000 live births, a slight decrease compared to 2013 (15.3 deaths per 1,000 live births). By gender, the IMR of males is higher than that of females, maintaining at approximately over 1 per mille. In addition, the IMR in rural areas is twice as high as the IMR in urban areas in both 2013 and 2018. Although the country's IMR is low and tends to decrease, there are huge gaps between regions. In particular, the IMR of the Central Highlands and the Northern Midlands and Mountains remains high, above 20‰. Notably, the IMR of the Central Highlands is nearly 3 times higher than the IMR of the Southeast (the region with the lowest IMR in the country).

In addition to the IMR indicating in part the maternity conditions of the mother, the under-5 mortality rate (U5MR) reflects the nutritional status and prevention and treatment of diseases in children under 5 years old. The results show that U5MR in Vietnam in 2018 was 21.4 deaths per 1,000 live births, down 1.7 per mille compared to 2013 (23.1 deaths per 1,000 live births). However, there is still a big gap in terms of the gender of children, urban/rural areas and regions. Particularly, the male U5MR nearly doubles that of females. Similarly, U5MR in rural areas is 2 times higher than the figure of urban areas. The Northern Midlands and Mountains and Central Highlands are the two regions with the highest U5MR in the country and nearly 3 times higher than the Southeast (the region with the lowest U5MR in the country).

Box 4.6. Unhygienic conditions, unsafe water, and the mortality of children aged 1-5

Access to clean water and hygienic sanitation facilities are essential to children's development. Therefore, unhygienic conditions and unsafe water provide a favourable environment for the spread of diseases. Meanwhile, children aged 1-5 are the most vulnerable group due to their poor resistance, so that the limited access to clean water and improved sanitation facilities leads to a high risk of mortality in this group.

According to UNICEF's baseline survey for the Integrated Early Childhood Development Programme in the three provinces of Dien Bien, Gia Lai, and Kon Tum (2018), only 27.2% of households use improved sanitation facilities, while the remaining 72.8% either do not have sanitation facilities, or do not meet the standards. In particular, in Kon Tum, 28.9% of households have improved sanitation facilities, while the proportion of households with access to sanitation facilities and, more importantly, improved sanitation facilities in Gia Lai is only 16.7%. Open defecation is still common in Gia Lai and is practiced by more than half of the households surveyed. About two-thirds of the households surveyed in all three provinces report using unsafe drinking water in the past 12 months when drought and flooding occur at the beginning and the end of the year. Moreover, some EM groups' practices in the nurturing of infants and young children based on unscientific methods have also contributed significantly to the high risk of child mortality. Thus, the goal of ending the preventable deaths of children aged 1-5 is also difficult to achieve.

Measure: period life expectancy at birth

The crude birth rate (CBR) is one of the indicators measuring the reproductive level of the population: it indicates the number of live births on average per 1,000 people in the year. According to Table 4.8, there is a downward trend for the CBR in Vietnam from 2013 to 2018. Specifically, the number of live births per 1,000 people reaches 17 in 2013 and decreases to 14.6 in 2018. The result of the general Census on Population and Housing in 2019 shows that the CBR in Vietnam has subtly increased again, reaching 16.3 live births/1,000 people. When comparing rural and urban areas, the CBR there declines in 2013-2018. Notably, the number of live births per 1,000 people in rural areas is higher than that in urban areas. By region, despite a similarly decreasing trend, the Northern Midlands and Mountains feature the highest CBR, standing at 18‰ in 2013 and 17.6‰ in 2018, respectively. Meanwhile, the Mekong River Delta has the lowest crude birth rate compared to other regions.

Table 4.8 also shows the life expectancy at birth in 2013 and 2018. This is one of the important indicators to assess the development level of a country, region, or locality; it is also used in the calculation of the Human Development Index. Compared to 2013 (73.1 years), the life expectancy of Vietnamese people in 2018 remains unchanged (73.5 years). Particularly, the life expectancy at birth for males is always lower than for females, with a gap of 5.4 years. Among regions, the Central Highlands have the lowest life expectancy at birth (70.3 years), while the highest is found in the Southeast (76.2 years). The average life expectancy is closely related to the health status, sanitation, and clean water (UNDP & CEMA, 2015). Therefore, there is a need to improve the access to health services, clean water, and improved sanitation facilities in the areas where the life expectancy at birth is lower than the national level, such as the Central Highlands.

Table 4.8. Live birth and life expectancy

Groups	Crude birth		Life expectancy at birth	
	Year 2013	Year 2018	Year 2013	Year 2018
Gender				
Male	N/A	N/A	70.5	70.9
Female	N/A	N/A	75.9	76.2
Urban/rural areas				
Rural	17.5	15.2	N/A	N/A
Urban	16.2	13.4	N/A	N/A
Region				
Red River Delta	16.2	14.9	74.3	74.7
Midlands and Northern	18.0	17.6	70.4	71.0
Northern and Coastal	17.8	15.8	72.5	72.9
Central Highlands	19.7	16.9	69.5	70.3
Southeast	17.6	12.8	75.7	76.2
Mekong Delta	15.3	11.6	74.4	74.9
Total	17.0	14.6	73.1	73.5

Source: Statistical Year Book from the General Statistics Office

"In my observation, wealthy households have a higher life expectancy than poor households because they have better conditions for healthcare. Rich people have better nutrition and more frequent medical checkups."

(KII with Head of Clinic - An Hiep Commune, Chau Thanh District, Soc Trang Province)

Indicator: specific-cause mortality rates

Table 4.9. Mortality rate by demographic and regional variables (‰)

Groups	Mortality rate (‰)	Mortality due to disease and illness (‰)	Mortality due to accident (‰)	Mortality due to other reasons (‰)
Gender				
Male	4.54	3.67	0.53	0.34
Female	3.03	2.55	0.13	0.35
Ethnicity				
Ethnic minorities	4.15	3.40	0.34	0.40
Kinh	3.72	3.06	0.33	0.33
Ethnic groups				
Kinh	3.72	3.06	0.33	0.33
Tay	4.86	4.02	0.45	0.39
Thai	3.92	3.21	0.35	0.36
Khmer	3.16	2.63	0.24	0.29
Muong	3.64	3.01	0.23	0.40
Nung	4.79	4.05	0.36	0.38
H'Mong	4.76	3.87	0.30	0.59
Dao	3.80	3.08	0.30	0.41
Others	4.10	3.32	0.37	0.41
Urban/rural areas				
Rural	3.98	3.25	0.36	0.37
Urban	3.30	2.77	0.25	0.28
Regions				
Red River Delta	4.23	3.45	0.31	0.47
Midlands and Northern Mountains	4.53	3.74	0.36	0.43
Northern and Coastal Central	4.28	3.42	0.44	0.42
Central Highlands	3.02	2.30	0.44	0.28
Southeast	2.57	2.14	0.23	0.20
Mekong Delta	3.44	2.99	0.26	0.19
Total	3.78	3.10	0.33	0.34

Source: Estimations from the 2009 Census on Population and Housing

Table 4.9 presents the mortality rate by demographic and regional characteristics calculated from the 2009 Census on Population and Housing. The male mortality rate is higher than the female mortality rate, as a result, women often live longer than men (as mentioned in life expectancy at birth). More specifically, the main causes of death in men and women are illness and disease. More males die of accidents than females.

When comparing ethnic groups, the mortality rate of the Kinh (3.72 ‰) is lower than that of ethnic minorities (4.15 ‰). The Tay, Nung, and H'Mong have death rates of 4.86 ‰, 4.79 ‰, and 4.76 ‰ respectively, and at the same time, they have the highest mortality rates. The main causes of death in these three ethnic groups are illness and disease. This also reflects the limited quality of health and access to health services for these ethnic groups. Remarkably, the Khmer have the lowest mortality rate (3.16 ‰). Rural areas have a higher mortality rate than urban areas. More specifically, illness and disease are still the main causes of death. Among regions, the Northern Midlands and Mountains feature the highest mortality rate (4.53 ‰), followed by the North and South-Central Coast (4.28%). This can be partly explained by the fact that the Northern Midlands and Mountains have disadvantaged geographical conditions with hills and mountains, which leads to a potential risk of accidents. On the other hand, the Southeast region has the lowest mortality rate (2.57 ‰).

Box 4.7. The Tay, Nung, and H'Mong have the highest mortality rates

Among EM groups, the Tay, Nung, and H'Mong have the highest mortality rates; the leading cause of death is illness and disease. This reflects the poor health quality of these ethnic groups. In addition, these EM groups also have limited access to health services due to the relatively long distance from villages to district/provincial hospitals (as previously mentioned). Therefore, the goal of improving their health and reducing their mortality rates are affected.

In addition, healthcare practices and living conditions also influence the mortality rates of these EM groups. Approximately two-thirds of Tay and Nung households have access to improved sanitation facilities, while the proportion for the H'Mong is rather lower, around 10%. For clean water, the Tay and Nung have relatively high access rates (over 80%), unlike the H'Mong (45%). Research by Rheinlander et al. (2010) about some EM groups in the northern mountain areas points out that Tay people have the poor hygiene habit of not reguarly washing their hands, despite their awarenes of the potential risks from this practice. In addition, the sanitation facilities are of poor quality and badly maintained. Households without sanitation facilties often defecate into the streams or the fields. The Report on 53 Ethnic Minorities (UNDP, CEMA & MDRI, 2017) shows that some EM groups are more at risk of HIV infection including the H'Mong, Tay, and Nung in provinces with HIV/AIDS prevalence and drug use.

In Hung Loi Commune, Yen Son District, Tuyen Quang Province, the research team also noted some feedback from commune health centre representatives about the health situation of some EM groups, including the Tay, Nung, and H'Mong. Accordingly, the leading cause of deaths in Hung Loi Commune is often related to strokes, hypertension due to lifestyle factors, and the late detection of diabetes, along with cancer. *"Nung people have the lowest average life expectancy due to lifestyle related diseases. [...] Hypertension falls into the Nung ethnic group because of their salt-eating habits."*

Table 4.10. Mortality rate by socio-economic characteristics (‰)

Group	Mortality rate (‰)	Mortality due to illness and disease (‰)	Mortality due to accidents (‰)	Mortality due to other causes (‰)
Education of hh. Head				
Less than primary	4.67	3.86	0.36	0.45
Primary education	3.93	3.26	0.35	0.32
Lower secondary education	3.82	3.12	0.35	0.35
Upper secondary education	3.53	2.88	0.30	0.34
Post-secondary education	2.89	2.38	0.20	0.31
Expenditure quintile				
Poorest	4.13	3.42	0.36	0.35
Second	4.20	3.43	0.40	0.37
Middle	3.93	3.19	0.37	0.38
Fourth	3.72	3.06	0.33	0.33
Richest	3.18	2.64	0.23	0.30
Total	3.78	3.10	0.33	0.34

Source: Estimation from the 2009 Census on Population and Housing.

As shown in Table 4.10, the mortality rate is linked to the education level of the household head and household living standards. More specifically, the higher the education level of the household head, the lower the mortality rate. When the head of the household has not graduated from primary school, the death rate is 4.67 ‰, 1.5 times higher than the mortality rate for households whose heads have graduated from college, university, or higher. Similarly, the poorest group has a higher mortality rate than the richest group.

4.3. HEALTHY LIFE

Access to clean water and improved sanitation facilities

Clean water and basic toilets are essential for the survival and development of children, and at the same time, are related to the health of the community. However, the lack of access to clean water and improved toilets remains a major challenge affecting households in Vietnam, especially in rural areas and areas with complicated geographical conditions. The research team used data from the 2016 VHLSS to estimate the proportion of the population with access to clean water and improved sanitation facilities by demographic and regional characteristics (presented in Table 4.11). A safe drinking water source is understood as one of the following: tap water leading into a house/yard/neighbour's house, public taps, drilled wells, protected dug wells, protected spring water, rainwater, tank water, pushcarts with small water tanks, and bottled water. According to international standards, improved sanitation facilities include: releasing/flushing water into sewage systems or septic tanks; biogas latrines; two-compartment dry toilets; and sunken toilets with ventilation pipes.

Table 4.11. Access to clean water and improved sanitation facilities by demographic and regional characteristics, 2016

Group	% households with flush latrine	% households with improved latrine	% households with tap water	% households with clean water
Ethnicity				
Ethnic minorities	29.6	45.8	13.4	74.1
Kinh	79.2	90.2	43.7	96.4
Ethnic groups				
Kinh	79.2	90.2	43.7	96.4
Tay	42.1	64.4	14.8	84.4
Thai	23.3	44.1	6.3	71.3
Khmer	48.3	54.8	43.1	100.0
Muong	40.4	63.6	3.4	80.3
Nung	34.8	66.9	10.3	85.7
H'Mong	3.7	9.9	0.5	45.1
Dao	12.7	31.5	1.7	56.0
Others	30.7	42.5	19.0	74.0
Area				
Rural	60.7	76.2	20.6	89.7
Urban	92.4	96.5	76.9	99.0
Regions				
Red River Delta	89.3	98.4	48.1	99.0
Midlands and Northern Mountains	43.2	66.3	14.2	80.5
Northern and Coastal Central	64.1	83.2	33.2	92.9
Central Highlands	51.6	63.9	18.3	84.4
Southeast	90.5	96.5	56.1	98.7
Mekong Delta	66.0	69.0	43.7	91.1
Total	70.8	82.7	38.6	92.6

Source: Estimations from VHLSSs.

The results show that the hygienic and clean water conditions of ethnic minorities are also much inferior to those of the Kinh.

Specifically, the rate of households with a flush toilet is 3 times higher among the Kinh than among ethnic minorities. Among the ethnic groups, the H'Mong are the group with the lowest percentage of households with a flush toilet, at 3.7 percent. This is partly explained by the fact that H'Mong ethnic minority people often live in high mountains, thus, the construction and use of flush toilets are difficult when there is not enough water. Notably, nearly half of Khmer households (48.3%) have flush

toilets, ranking second behind the Kinh (79.2%). The Tay and Muong come next, with a proportion of households with flush toilets of over 40%. Over one-third of Nung households have flush toilets. The Thai and Dao have a relatively low rate of households with flush toilets.

In terms of overall access to improved sanitation facilities (including flush toilets), the situation of EM households has improved, but there are still differences between EM groups. Together, 90% of Kinh households have improved sanitation facilities, while only 10% of H'Mong households have access to this type of facility. About two-thirds of Tay, Muong, and Nung households and more than half of Khmer households have access to improved sanitation. The Dao still have a relatively low access rate compared to the other ethnic groups (31.5%).

Approximately half of Kinh households have piped water, while only about 13% of ethnic minority households have access to this water source. The Khmer have only 43.1% of households with piped water, ranking second. Notably, only 0.5% of H'Mong households have access to piped water. Other ethnic groups also have relatively low access rates.

In terms of hygienic water sources (including tap water), overall both Kinh and ethnic minorities have relatively high access rates. However, the H'Mong and Dao still have a significantly lower proportion of households with hygienic water compared to the other ethnic groups.

The mortality rate (as mentioned above) is closely related to health issues, toilet conditions, and clean water. Ethnic groups with low life expectancy and a high mortality rate often fall into the group with the most limited medical, healthcare, and hygienic conditions and vice versa. The H'Mong's relatively poor access to clean water and improved sanitation facilities compared to the other ethnic groups partly explains why they have the highest mortality rate. Furthermore, the index of access to clean water and sanitation facilities indicates that much more effort is needed to increase the proportion of ethnic minority households using clean water and improved sanitation facilities in their daily activities, as well as to improve the quality of their lives.

Similarly, there are clear differences in the access conditions of rural areas compared to urban areas, as well as between regions.

The proportion of households with access to flush toilets in particular and improved sanitation facilities in general is 90% in urban areas, while it stands at only 60.7% and 72.2% respectively in rural areas. When comparing regions, the Red River Delta and the Southeast are the two with the highest percentage, while the Central Highlands and Northern Midlands and Mountains have relatively low access rates. The Central Highlands and the Midlands and Mountains are also the places where many ethnic minorities are concentrated.

For piped water, the proportion of households in rural areas using this water source is less than one-third of the proportion of households in urban areas. The two regions with the highest proportion of households using piped water are the Red River Delta and the Southeast. The lowest proportions of households with piped water are found in the Northern Midlands and Mountains (14.2%) and the Central Highlands (18.3%).

As for the standards of hygienic water sources, the proportions of households with access have increased, without prominent differences between rural and urban areas, as well as between regions.

Box 4.8. Access to clean water and sanitation still needs improvement

The conclusions from discussions with FGDs, as well as KIIs with officials in the three provinces indicate that, in recent years, local access to clean water and sanitation has made some progress.

In An Hiep Commune, Chau Thanh District, Soc Trang Province, there are up to 63% of Khmer and 37% of Chinese and Kinh. Through discussions with people participating in FGDs and interviews with commune officials, up to 90% of households currently have access to hygienic water in the commune, of which many have tap water. For those households still facing difficulties, the local government has taken measures such as the distribution of jars of water. In addition, support from external organisations has also contributed to improving the local access to hygienic water and the use of hygienic latrines.

"The access to clean water is 90% here, only a few Khmer households who live too far away from the centre still lack access to clean water; as such, there is specific support for them such as providing knowledge and dispensing jars of water for them to use. [...] There was a construction project in 2016 of a non-government organisation in collaboration with the rural clean water centre, specializing in both constructing clean waterworks and developing livelihoods. The organisation also partnered with the Department of Health to support the poor with latrines in terms of funding, while the more well-off households are given design support."

(KII with Vice-Chairman of Commune - An Hiep Commune, Chau Thanh District, Soc Trang Province)

However, aside from receiving support from local authorities and external organisations on access to clean water, households also need to increase their awareness to protect water sources and build hygienic latrines.

"Clean water is not guaranteed. The reason is that during the process of growing coffee and pepper, people use plant protection drugs in the form of chemicals and so residue is absorbed into the soil and goes into the water source."

"A few years ago, especially in pepper farming, there were insects and pets related to pepper, people used to buy whole boxes, they poured it onto the pepper, it absorbed it, then the water absorbed it. A few years ago, drugs were often used without careful consideration. But in these past two years, everyone is afraid. Nobody dares to use it."

(FGD in Quang Hiep Commune, Cu M'gar District, Dak Lak Province)

"The difficulity is to instruct them to build latrines which should not pollute the environment as people like to do on their own preference. In addition, many households do not have latrines but encouraging them to construct does not work. They usually use temporary latrines or have open defecation in the fields, which is unhygienic and could lead to some diseases."

(KII with Head of Health Clinic - Quang Hiep Commune, Cu M'gar District, Dak Lak Province)

Table 4.12. Access to clean water and improved sanitation facilities by demographic characteristics and expenditure group, 2016

	% households with flush latrine	% households with improved latrine	% households with tap water	% households with clean water
Education of hh. Head				
Less than primary	49.7	61.9	27.2	84.6
Primary education	65.0	78.7	32.0	91.6
Lower secondary education	74.0	89.3	33.6	95.2
Upper secondary education	87.1	94.9	53.4	97.3
Post-secondary education	95.8	99.2	70.4	98.0
Expenditure quintile				
Poorest	28.7	48.0	11.4	76.6
Second	63.2	82.0	27.1	93.7
Middle	77.6	89.5	35.2	96.4
Fourth	88.3	94.9	50.2	98.0
Richest	96.0	98.8	68.9	98.7
Total	70.8	82.7	38.6	92.6

Source: Estimations from VHLSSs.

Table 4.12 provides more information on access to clean water and improved sanitation facilities by demographic characteristics and expenditure group based on the estimates of the research team from the VHLSS 2016. The capability to access sanitation facilities and clean water increases with the level of education of the household head. Households with heads graduating from lower secondary education or higher are likely to have more access to flush toilets (over 70%) than households whose heads do not have any degree (49.7%). For households whose heads have not completed primary school, the rate of households with access to tap water is 27.2%. Meanwhile, this rate is 70.4% when the education level of the household head is college, university, or higher.

Similarly, access to sanitation and clean water increases significantly as household living standards improve. There is, however, a clear disparity between the richest and the poorest. Specifically, the gap in access to flush toilets in particular and improved sanitation facilities are 67.3 and 50.8 percentage points, respectively. Access to piped water among the richest group stands at 68.9%, while only 11.4% of the poorest households have access to this type of water. For hygienic water sources, although there is still a difference between the richest and the poorest groups, the access rate is over 76%.

Poverty rate

Table 4.13. Poverty rate (%)

Group	VHLSS 2010	VHLSS 2012	VHLSS 2014	VHLSS 2016
Ethnicity				
Ethnicity minorities	62.5	56.1	53.6	42.4
Kinh	13.0	9.8	6.4	3.1
Ethnic groups				
Kinh	13.0	9.8	6.4	3.1
Tay	49.9	35.4	33.2	19.5
Thai	70.3	67.1	62.8	51.3
Khmer	51.0	30.0	23.9	15.8
Muong	57.5	51.2	50.7	31.1
Nung	57.1	45.6	41.9	28.4
H'Mong	91.9	90.6	90.4	81.6
Dao	77.8	73.5	68.8	45.8
Others	62.2	58.9	57.3	45.5
Area				
Rural	27.0	22.2	18.6	13.6
Urban	6.0	5.4	3.8	1.6
Regions				
Red River Delta	12.0	7.5	5.2	2.2
Midlands and Northern Mountains	44.9	42.0	37.3	28.0
Northern and Coastal Central	23.7	18.3	14.7	11.8
Central Highlands	32.7	29.6	30.4	24.1
Southeast	7.0	5.1	3.7	0.6
Mekong Delta	18.7	16.2	9.8	5.9
Education of hh. head				
Less than primary	39.9	34.6	29.1	23.9
Primary Education	23.5	18.4	15.5	10.1
Lower secondary education	15.3	13.8	9.9	6.3
Upper secondary education	7.3	4.8	2.9	2.1
Post-secondary education	0.9	0.3	0.5	0.4
Total	20.8	17.2	13.5	9.8

Source: Estimations from VHLSSs.

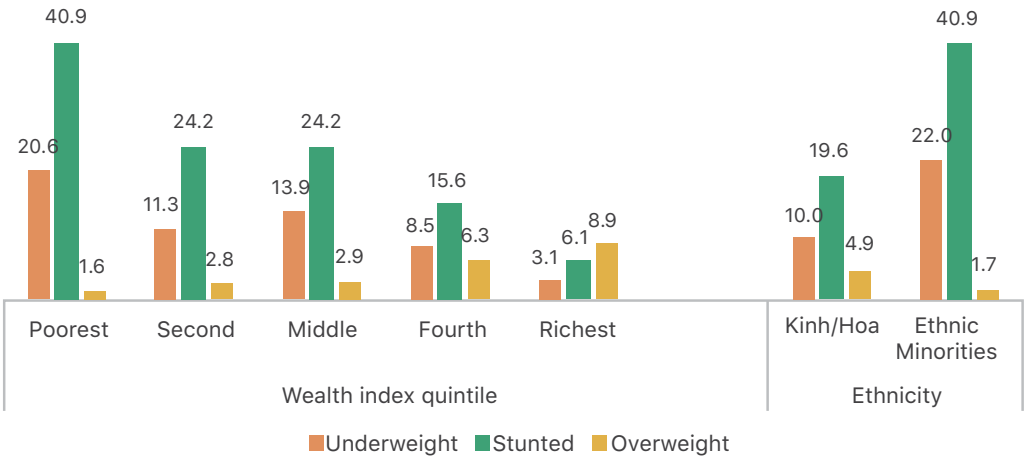
Table 4.13 shows that while the poverty rate has a tendency to decrease, the gap between some groups is still high in 2010-2016. In particular, the poverty gap between ethnic minorities and the Kinh is still relatively high. In 2010, the gap in poverty rates between the two groups decreases from 49.5%, down to 39.3% in 2016. The gap in poverty rates between rural and urban areas in 2010 is 21%, down to 12% in 2016. The Kinh group have achieved a strong socio-economic transformation: from 13% of the Kinh population in poverty in 2010 down to only 3.1% in 2016. The Khmer and Tay also show remarkable progress in poverty reduction. Nonetheless, some other ethnic minorities have not yet caught up. In 2016, overall, 42.4% of ethnic minorities still live in poverty. Some ethnic groups such as the Thai and Dao still have about half of their population in poverty. Notably, the poverty rate of the H'Mong in 2010 is 91.9%, down to 81.6% in 2016, meaning that 4/5 of the H'Mong are still poor in 2016.

By rural and urban areas, the disparity in poverty between the two has been narrowing. The gap in poverty rates is 21% in 2010, dropping to 12% in 2016. According to geographical areas, the Southeast region has achieved the most impressive results in poverty reduction. The poverty rate in this area decreases from 7% to below 1% in the period 2010-2016. The Northern Midlands and Mountains remain the poorest region in the country over the period. From 2010 to 2016, the poverty rate in this region drops by more than 16 percentage points, but remains the highest. Additionally, even though the rate has dropped by more than 8 percentage points, the Central Highlands are still the second poorest region in the country. It is easy to see that the Northern Midlands and Mountains and Central Highlands are inhabited by a large number of ethnic minorities who face limitations in their access to clean water and sanitation.

The poverty rate has a strong correlation with the education level of the household head. More specifically, the poverty rate of households with heads who have graduated from college, university, or higher is less than 0.5%, while that of households whose heads have not finished high school is 23.9% in 2016. In the period 2010-2016, the poverty rates among households with different levels of education all decline. However, for households whose heads graduated from college, university, or higher, the poverty rate is very low and practically unchanged. The decrease from 0.9% (2010) to 0.4% (2016) is not statistically significant.

Health condition of children under 5

Figure 4.11. Health conditions of children under 5 (%)



Source: Estimations from the MICS 2011.

Good nutrition plays an essential role for children's health and development. According to UNICEF's statistics, 1.8 million Vietnamese children under 5, mostly from ethnic minorities in difficult geographical areas such as the Central Highlands, are malnourished and at risk of permanent brain injury ("Nutrition", n.d.). Research also shows that problems related to low weight can negatively affect children's physical growth and psychological development (Cora, et al., 2004).

Figure 4.11 shows the health status of children under 5 by living standard group and ethnicity, estimated from the MICS 2011. There are clear differences between living standard groups and between the Kinh/Chinese and other ethnic groups. More specifically, children who live in economically disadvantaged households are likely to be more malnourished. The prevalence of underweight and stunted children in group 1 (the poorest) is the highest, 20.6% and 40.9%, respectively. Meanwhile, the prevalence in group 5 (the richest) is rather low, 3.1% and 6.1%, respectively.

While children from poor households face more malnutrition, children from rich households are at greater risk of being overweight. Specifically, the percentage of overweight children in group 5 (the richest) is 8.9%, about 5 times higher than the rate in group 1 (the poorest). Group 4 features the second highest rate of overweight children (6.3%). In addition, children in ethnic minority households suffer more from malnutrition and stunting than those in Kinh/Chinese households. Meanwhile, the overweight rate of Kinh/Chinese children (4.9%) is higher than that of ethnic minority children (1.7%), although this difference is not statistically significant.

Table 4.14. Health conditions of children under 5, by demographic characteristics (%)

Group	Underweight	Stunted	Wasted	Overweight
	% < - 2SD	%< - 2SD	%<- 2SD	%> 2SD
Gender				
Male	12.1	23.7	4.3	5.5
Female	11.4	21.6	3.9	3.4
Mother's education				
None	22.4	40.8	7.7	0.7
Primary education	13.9	28.7	5.7	2.7
Lower secondary education	12.7	24.9	4.0	3.7
Upper secondary education	10.3	19.5	3.7	6.8
Tertiary	5.5	9.1	2.1	6.7
Area				
Urban	6.0	11.8	3.9	8.0
Rural	13.9	26.8	4.2	3.1
Region				
Red River Delta	7.4	18.3	3.6	2.5
Northern Midland and Mountain	15.4	31.4	4.3	3.4
Coastal Area	14.3	28.4	4.3	4.3
Central Highlands	17.6	30.6	4.1	4.2
Southeast	4.5	9.7	3.7	10.6
Mekong River Delta	14.3	20.7	4.8	2.9

Source: Estimations from the MICS 2011.

Table 4.14 provides more information about the health status of children under 5 by demographic characteristics. The results show that there is no statistically significant difference in the proportion of underweight malnourished children between boys and girls (12.1% and 11.4%). However, this rate is significantly different among children whose mothers have college, university, or higher education than among those whose mothers do not have a degree (5.5% compared to 22.4%). Thus, the higher the mother's education is, the lower the rate of underweight children would be. In addition, the proportion of underweight children in rural areas (13.9%) is twice that in urban areas (6%). The South East region has the lowest incidence of underweight malnourished children among regions (4.5%), while the Central Highlands have the highest rate (17.6%). Ranked second in this ratio are the Northern Midlands and Mountains (15.4%).

For stunting malnutrition, there is no statistically significant difference between boys and girls (23.7% and 21.6%). The mother's education is linked to limited knowledge of child rearing and care. In particular, the rate of stunted children when mothers do not have a degree is 40.8%, 4 times higher than when the mother's education level is college, university, or higher (9.1%). This finding is consistent with the results of the Baseline Survey conducted by UNICEF in the 3 provinces of Dien Bien, Gia Lai, and Kon Tum, which show that stunting rates tend to decrease as the education level of the primary caregiver improves. Moreover, children in urban areas have a lower rate of stunting (11.8%) than children in rural areas (26.8%). In the comparison among regions, the Northern Midlands and Mountains and the Central Highlands are those with the highest rates of stunting malnutrition (both over 30%), 3 times higher than the Southeast (with the lowest stunting rate, 9.7%).

For wasting, there is no significant difference between sexes, rural and urban areas, and regions. The percentage of children with malnutrition when their mothers are without education is 7.7%, 5.6 percentage points higher than when mothers have attended college, university, or higher.

Although the proportion of overweight boys (5.5%) is higher than the proportion of overweight girls (3.4%), this difference is not statistically significant. Children are at a higher risk of being overweight when the mother is highly educated. More specifically, when the mother has reached the college, university, or higher level, the proportion of overweight children is 6.7%, while this rate is only 0.7% for mothers without a degree. In addition, the proportion of overweight children in urban areas (8%) is higher than in rural areas (3.1%). Apart from the Southeast, the region with the highest rate of overweight children (10.6%), there is no statistically significant difference between the remaining regions.

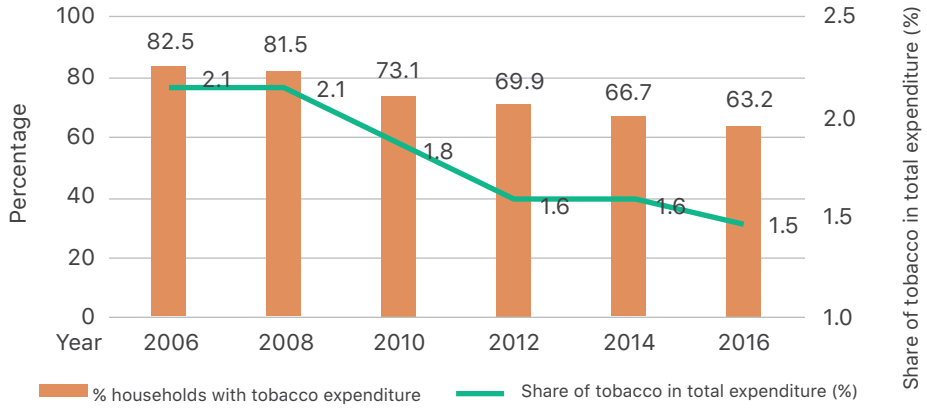
Proportion of tobacco consumption

The VHLSSs contain data on household consumption of tobacco products in the past 12 months. There are no data on the type of tobacco products. Households were asked for their consumption of purchased and homemade tobacco. The share of homemade tobacco accounts for a very small proportion of tobacco consumption, less than one percent.

The proportion of people above 15 who smoke in Vietnam is 23.8% in 2010, slightly decreasing to 22.5% in 2015 (estimated from Global Adult Tobacco Surveys 2010 and 2015). Smoking in Vietnam is mainly found among men, with a smoking rate of 45% in 2015. The smoking rate among women is only 1.1% in 2015.

Using VHLSSs, the research team estimated the proportion of the population living in households with tobacco consumption in the past 12 months (Figure 4.12). Household consumption of tobacco decreases over time. The proportion of the population living in households consuming tobacco decreases from 82.5% in 2006 to 63.2% in 2016. For tobacco-consuming households, the share of tobacco expenditure in total household expenditure also decreases over time. It should be noted that although the prevalence of smoking among people above 15 is only 22.5% in 2015, the share of the population living in households with tobacco consumption reaches 63.2%. It implies that there are more people who can be exposed to second-hand smoke.

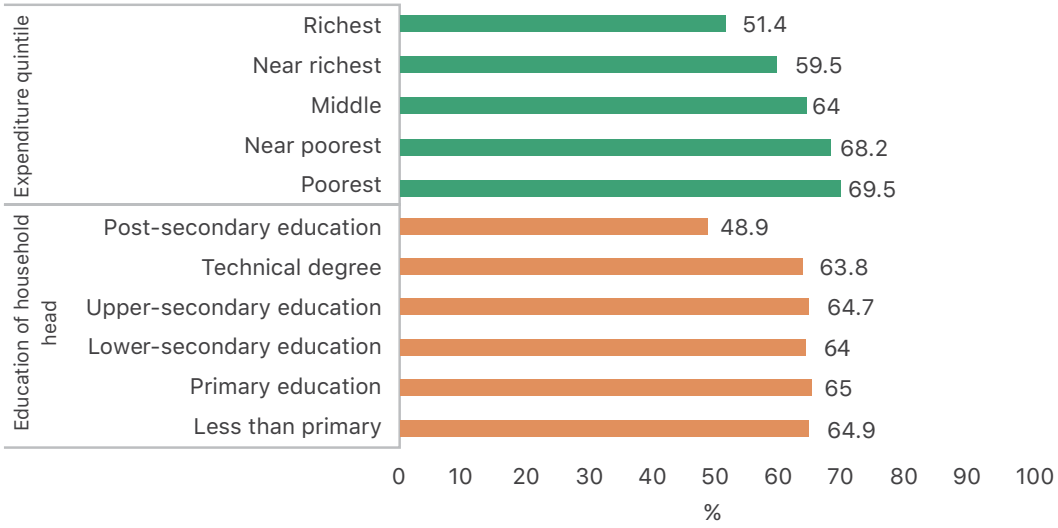
Figure 4.12. Proportion of households with tobacco consumption



Source: Estimations from VHLSSs.

Figure 4.13 shows a negative correlation between smoking and the wealth level. The proportion of the population in tobacco-smoking households is lower in rich households than in poor ones. Rich households are more concerned about health and they might have more information on the harmful effect of smoking. Households with highly educated heads also have a lower rate of tobacco consumption than other households.

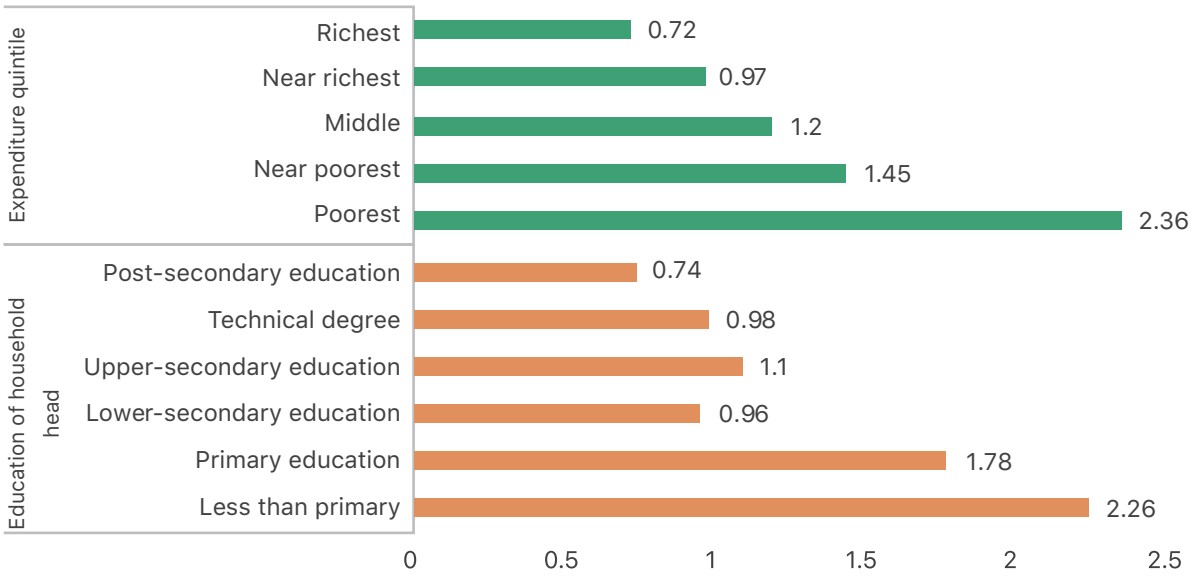
Figure 4.13. Proportion of households with tobacco consumption by education of household head and expenditure quintile in 2016 (%)



Source: Estimations from VHLSSs.

Among households with tobacco consumption, **the share of tobacco expenditure in total expenditure is also lower for richer households and those with higher education** (Figure 4.14). Households in the highest quintile spend 0.74% of their total expenditure on tobacco, while this share for the lowest quintile is around 3 times higher, at 2.26% in 2016. The share of tobacco consumption of households whose heads have less than primary education is also around 3 times higher than that of households with post-secondary household heads.

Figure 4.14. Share of tobacco expenditure in total household expenditure in 2016 (%)



Source: Estimations from VHLSSs.

4.4. DRIVERS OF INEQUALITIES IN HEALTH

Through the analysis of health status and treatment, the team found a clear inequality in access to health. It occurs throughout the course of life, starting from early childhood until adulthood. Those who suffer the most from inequalities are ethnic minorities, the inhabitants of rural areas, of the Midlands and Northern Mountains and Central Highlands, people from poor families or whose parents have a low education level. Identifying the causes of inequalities helps to explain why there are disparities in health measurement indicators between ethnic groups, regions, and income groups. Based on the comparative analysis of indicators, the research team found that these inequalities are often related to demographic characteristics. The four main drivers are identified below.

Unequal access to quality healthcare

The research indicates that **geographical distance may increase inequalities in access to quality health services**. In particular, the distance from home to health facilities such as district, provincial, or central hospitals is relatively great for some ethnic minorities compared to the Kinh, resulting in additional travel costs, as well as in costs for the accompanying caregivers. In addition, many ethnic minority groups are poor so they may experience difficulties due to catastrophic health expenditure.

As a result, they have limited access to high-quality health services and may not have enough money to spend on timely quality health care.

One of the policies to reduce inequalities that the government has implemented quite well is free health insurance for the poor and EM groups. In the period 2010-2016, the proportion of poor people with health insurance cards reaches nearly 90%. Similarly, EM groups such as the Tay, Thai, Muong, Nung, H'Mong, and Dao all reach over 90%. The provision of free health insurance cards helps reduce the financial burden on the health expense of the poor and EM groups, and at the same time gives them the opportunity to access basic health services at health facilities. However, there is still a growing gap in health policies when the health visits of the poor and some EM groups are relatively low. Because of the long distance from home to health facilities (over 40km to less than 70km, for hospitals at the provincal/central level), travel costs as well as costs related to accompanying caregivers are incurred. Besides, the near-poor group is at risk of high OOP payment when their health insurance coverage is the second lowest. Therefore, the government needs to implement a policy to support transportation costs for caregivers who accompany patients when they visit provincial and central hospitals for treatment. In addition, there should be attention paid to the near-poor group in order to reduce their OOP payment.

Unequal access to maternal and child healthcare

Despite impressive progress in child healthcare with the infant and under-five mortality rates on downward trends, there are significant gaps between regions. In particular, the places with the highest mortality rate are the Central Highlands and the Northern Midlands and Mountains. These are the areas where a large number of ethnic minorities live. In the Northern Midlands and Mountains, EM groups account for a large proportion of the total population, 56.2%, while the proportion in the Central Highlands is 37.7% (GSO, 2019). The awareness of parents or primary caregivers belonging to EM groups of the importance of child healthcare, as well as of their roles in early childhood development remains limited. In addition, the economically disadvantaged conditions of households also lead to the fact that children in poor families are less cared for than those in wealthy families. This explains the inequality among children in accessing nutrition and appropriate feeding practices for their age, manifested by the indicators of IMR and U5MR, the rates of malnutrition and stunted children.

Unequal access to clean water, adequate sanitation, and good nutrition

Although improved water supply and sanitation facilities have been provided across the country by the government with the support of foreign organisations – especially in densely populated areas with EM group – some challenges remain in access to them. Due to economically disadvantaged conditions, many poor households still have no access to clean water and improved sanitation facilities. In addtion, the provision and maintenance of water and sanitation work was not conducted properly, so that these households face difficulties in access. Despite the support programme by the government and organisations for the construction of water and sanitation works, many people in the Central Highlands or Midlands and Northern Mountains keep their habits of open defecation, or do not have proper usage of the facilities. This is explained by the lower rate of access to clean water and improved sanitation facilities of poor households compared to rich households.

Box 4.9. Lack of proper maintenance in the waterworks and unhealthy sanitation habits

During the discussions with participants, some addressed the issue of maintenance. Particularly, in Hung Loi Commune, Yen Son District, Tuyen Quang Province, female participants pointed out that there used to be a water work for local people. However, it was broken later, mostly due to the fact that people did not utilize and maintain it properly. Currently, people have to take water from dug wells or springs, which contain lime. Thus, they have to filter the water carefully before using it.

"In the past, a water line was equipped to households, but too many people used it and did not keep it up properly; then it was broken."

(FGD with female participants – Hung Loi Commune, Yen Son District, Tuyen Quang Province)

Regarding the use of sanitation works, it is noted that many local residents keep their unhealthy habits such as open defecation in the fields or do not want to use the latrines. Thus, this also affects their chance of accessing sanitation works properly.

"The difficulty is to teach them how to build toilets that are good and don't cause pollution, but it is difficult because they like to do things the way they want. Also, many households don't have toilets and won't build one even though we have encouraged them to. They often use public toilets or do it in the fields, which makes it very unhygienic and increases the likelihood of spreading diseases."

(KII with Head of health centre - Quang Hiep Commune, Cu M'gar District, Dak Lak Province)

Besides, poor households have difficulties in providing good nutrition for children compared to rich households, so the percentage of malnurished children in poor households is often much higher than that in rich households. Furthermore, mothers' education level also affects children's nutritional status.

Negative social and cultural norms that could lead to health risks

The cultural practices of some ethnic minorities may have a negative impact on their health status. For example, H'Mong women give birth at home with the support of a traditional birth attendant or a traditional healer (usually an older woman) and encounter psychological barriers such as feeling embarrassed in direct contact with other people. During pregnancy, H'Mong women visit healthcare facilities less than other ethnic groups (UNICEF, 2018), which consequently affects maternal and child healhcare. Besides, health risks may result from a lack of adequate knowledge and habits. For instance, households with higher education tend to consume less tobaco than those with low education.

CHAPTER

5/7

INEQUALITY IN EDUCATION AND LEARNING

The ability to learn is both important in its own right but also contributes to equality in other spheres of life

The capability to be knowledgeable, to understand and reason, and to have the skills to participate in society is a critical life domain, as the ability to learn is both important in its own right but also contributes to equality in other spheres of life.

This domain covers inequalities in education over the course of life, from early development to adulthood. The early years are recognized as critical given their importance for healthy cognitive development and future health, behaviour, and learning. Throughout the years of schooling, aspects of access and quality are considered, as well as the unequal treatment of pupils within schools (including bullying from other children or ill treatment by teachers) which are also important determinants of educational outcomes. This domain also captures the years beyond schooling to include lifelong learning and the knowledge required to participate in society including technological skills, skills related to accessing information on the internet, and the skills to distinguish between information of differing qualities.

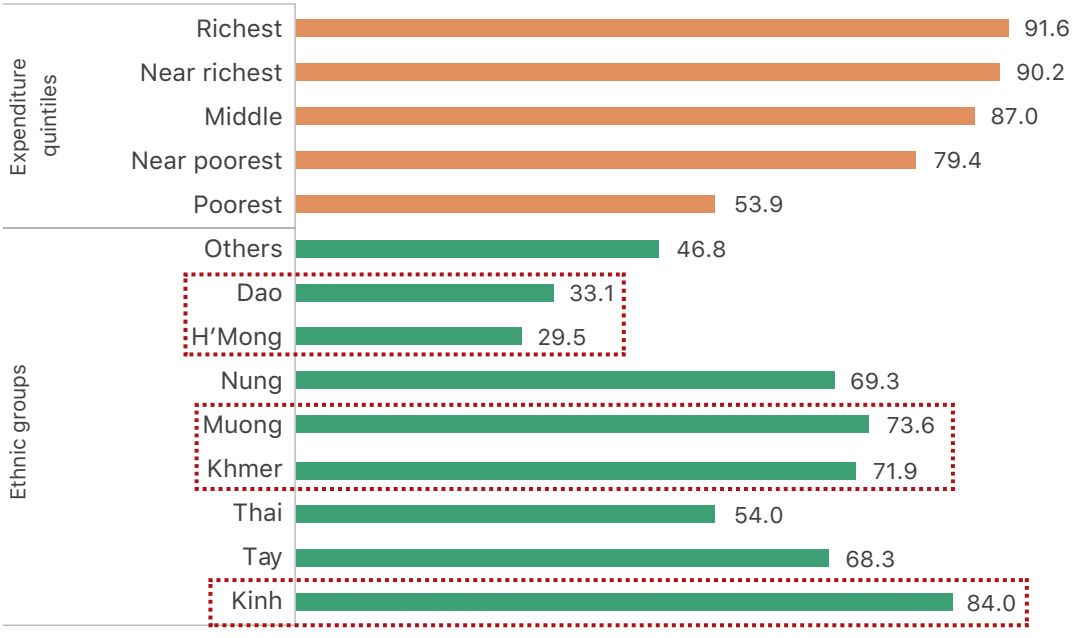
This domain also seeks to look beyond traditional education at whether individuals are fulfilled and stimulated intellectually. Expanding the education capability enables individuals to participate in activities such as reading a book or enjoying an art exhibition, or other activities that bring intrinsic pleasure, ultimately enhancing well-being and the quality of life. All of these aspects are important and can be considered under this domain.

Due to the limitation of data, we cannot measure all the indicators suggested in the MIF (the list of indicators is reported in Table A.1 in Appendix 2). Therefore, we select a number of important indicators for which there is available data. We measure inequality in these indicators by comparing their means between different population subgroups disaggregated by gender, ethnic group, education level, poverty, expenditure and wealth quintile, urban/rural area, and geographic region.

5.1. BASIC SKILLS

Proportion of children below 5 with purchased toys

Figure 5.1. Proportion of children below 5 with purchased toys, 2016



Source: Estimations from VHLSSs.

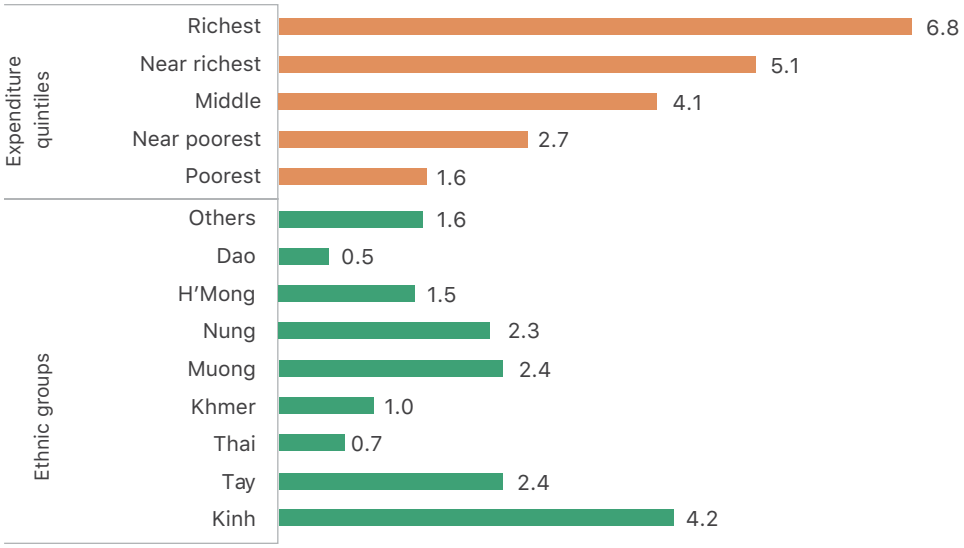
Figure 5.1 shows data regarding the proportion of children below 5 with purchased toys, based on estimations from the 2016 VHLSS. There is wide variation across different ethnic groups. Kinh children have the largest percentage, at 84%, followed by Muong children (at 73.6%), and Khmer children (at 71.9%). More than half of Nung, Tay, and Thai children under 5 years of age own purchased toys. H'Mong and Dao children rank the lowest, at 29.5% and 33.1%, respectively.

Children from households of different expenditure quintiles also access purchased toys differently. In particular, children living in households in the 5th expenditure quintile (richest group) have significantly better access to purchased toys than children from households in the 1st (poorest group) and 2nd quintiles (near poorest group). There is no significant difference in the proportion between children from households in the 3rd and 4th quintiles.

Having a purchased toy implies the opportunity to access objects for the purpose of early childhood development (ECD). In general, children from ethnic minorities and children living in poor households have more limited access than children from the Kinh group and children living in rich households. The inequality in access to purchased toys can be explained by the lack of awareness of the importance of ECD among families and parents. In many cases, the root cause is parents' low education level, especially mothers'.

Number of comic books per child (children below 18)

Figure 5.2. Number of comic books per child (children below 18) (2016)



Source: Estimations from VHLSSs.

Figure 5.2 displays data regarding the number of comic books per child (children below 18), based on estimations from the 2016 VHLSS. Similar to the previous measure, there are significantly different numbers of comic books for children from different ethnic groups and living in households of different socio-economic statuses. To be specific, Kinh children have the largest number of comic books per child (4.2 books), followed by Tay and Muong children (2.4 books), and Nung children (2.3 books). Thai and Dao children have the lowest number of comic books, less than 1 book/child.

Also, **children from rich households are likely to have more comic books per child than those from poor households**. To be specific, the average number of comic books per child in households from the 5th expenditure quintile (richest group) is approximately four times that of children living in households belonging to the 1st expenditure quintile (poorest group), at 6.8 books compared to 1.6.

Reading is considered as an activity to promote children's early learning and school readiness. Inequality in the access and ownership of comic books by children from different ethnic groups and those living in households of different socio-economic statuses can be partly explained by their parents' low awareness of the participation of comic books in ECD and their parents' low education level, as well as by households' inability to afford the time and cost of purchasing comic books.

Percentage of children aged 36-59 months who are developmentally on track - literacy-numeracy, physical development, social-emotional development, and learning and Early childhood development Index

Table 5.1. Percentage of children aged 36–59 months who are developmentally on track - literacy-numeracy, physical development, social-emotional development, and learning and Early childhood development Index (2014)

Group	Percentage of children aged 36–59 months who are developmentally on track, 2014				
	Literacy Numeracy	Physical	Socio-emotional	Learning	Early child development index
Gender					
Male	30.6	96.4	90.5	94.4	88.2
Female	28.1	96.6	91.9	93.9	89.2
Ethnicity					
Kinh/Chinese	30.8	96.9	92.1	96.4	91.2
Ethnic minorities	22.6	94.7	87.2	84.0	77.1
Area					
Urban	33.0	97.7	91.4	95.5	90.8
Rural	27.9	96.0	91.1	93.6	87.8
Regions					
Red River Delta	36.4	98.0	91.5	97.3	93.7
Midlands and Northern Mountains	22.6	96.1	90.1	85.5	81.8
Northern and Coastal Central	40.4	95.4	89.5	94.3	87.0
Central Highlands	24.6	96.5	91.9	94.1	90.4
Southeast	25.3	94.3	93.0	94.3	89.1
Mekong Delta	17.7	97.9	92.1	97.5	89.2
Mother's education					
Less than primary	5.7	94.9	91.9	78.7	74.9
Primary education	20.4	93.7	86.4	94.3	82.8
Lower secondary education	33.7	97.2	93.0	95.3	91.5
Upper secondary education	32.3	96.8	91.7	95.3	91.5
Post-secondary education	35.2	98.2	91.7	96.3	91.1
Wealth Index Quintile					
Poorest	18.4	93.9	90.2	85.2	81.1

Group	Percentage of children aged 36–59 months who are developmentally on track, 2014				
	Literacy Numeracy	Physical	Socio-emotional	Learning	Early child development index
Second	27.3	96.6	92.9	97.1	90.1
Middle	33.8	96.5	90.2	97.3	90.8
Fourth	35.1	98.4	90.3	95.8	90.6
Richest	34.3	97.6	92.8	96.8	92.2
Total	29.4	96.5	91.2	94.2	88.7

Source: Estimations from the MICS 2014

Early childhood development (ECD) is defined as an orderly, predictable process along a continuous path, in which a child learns to handle increasingly complicated levels of moving, thinking, speaking, feeling, and communicating to others. Physical growth, literacy and numeracy skills, socio-emotional development, and readiness to learn are vital domains in a child's overall development, which is the basis for overall human development (Shonkoff & Phillips, 2004).

A 10-item module was used to calculate the ECD Index (ECDI) in the MICS. The ECDI is based on selected milestones that children are expected to achieve by the ages of 3 and 4 years old. The 10 items are used to determine whether children are developmentally on track in four domains:

- Literacy – Numeracy: children are identified as being developmentally on track based on whether they can identify/name at least 10 letters of the alphabet, whether they can read at least four simple, common words, and whether they know the name and recognize the symbols of all numbers from one to 10. If at least two of these are true, then the child is considered developmentally on track.
- Physical: if the child can pick up a small object with two fingers, like a stick or a rock from the ground and/or the mother/caretaker does not indicate that the child is sometimes too sick to play, then the child is regarded as being developmentally on track in the physical domain.
- Socio-emotional: children are considered to be developmentally on track if two of the following are true. If the child gets along well with other children, if the child does not kick, bite, or hit other children, and if the child does not get easily distracted.
- Learning: if the child follows simple directions on how to do something correctly and/or when given something to do, is able to do it independently, then the child is considered to be developmentally on track in this domain.

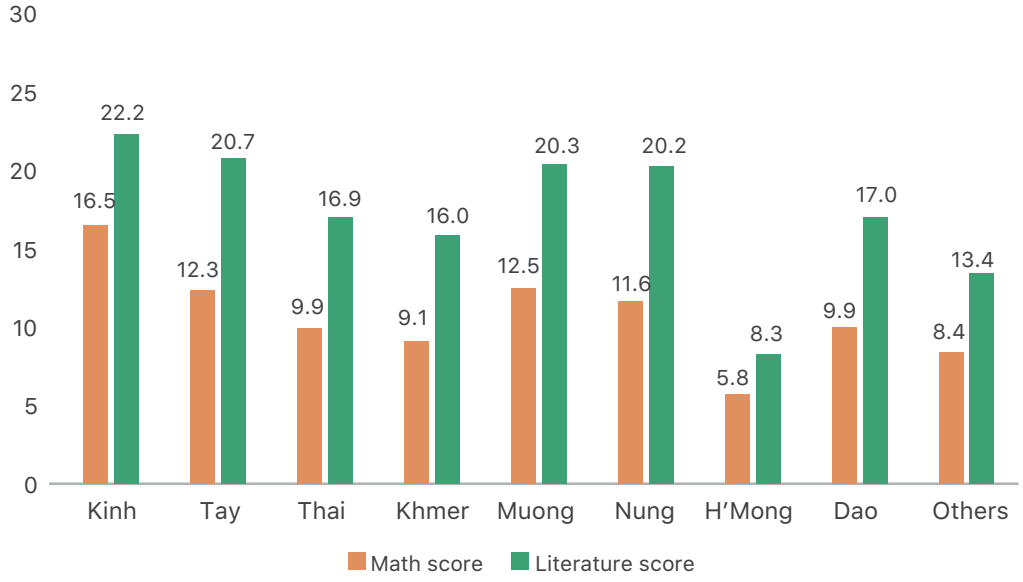
The ECDI is calculated as the percentage of children who are developmentally on track in at least three of these four domains.

Table 5.1 shows that 88.7% of children aged 36-59 months in Vietnam are developmentally on track. No difference is observed by sex. However, children living in the poorest households have a lower ECDI (81.1%) than those living in the richest ones (92.2%). The analysis of the four domains of child development shows that 29.4% of children are on track in the literacy-numeracy domain, but more are so in the physical (96.5%), learning (94.2%), and socio-emotional (91.2%) domains. The low percentage of children able to perform activities requiring literacy and numeracy skills can be partly attributed to the unavailability of learning materials at home, for example comic books (as mentioned in the analysis of the comic book measure).

In each individual domain, a higher score is associated with children living in the richest households, children in urban areas, Kinh/Chinese children, and children whose mothers' education level is high. This finding is also in agreement with the findings from the Baseline Assessment of the Integrated Early Childhood Development (IECD) programme delivered by UNICEF Vietnam in 27 communes of 9 districts in three provinces, namely Dien Bien, Gia Lai, and Kon Tum in 2018 (UNICEF Viet Nam, 2019). In that study, the research team also collected data and computed the ECDI.

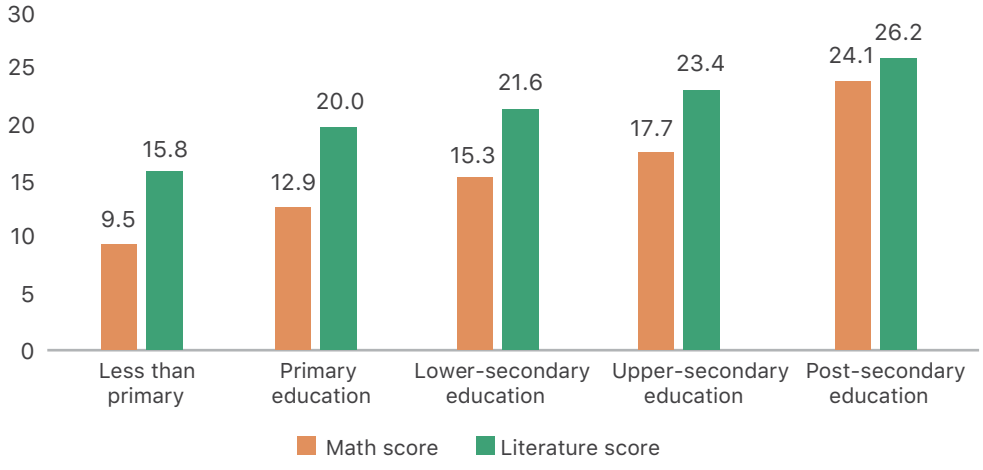
Math and literature score of grade-5 students

Figure 5.3. Math and literature score of grade-5 students by ethnic group (2016)



Source: Estimations from VNEN data.

Figure 5.4. Math and literature score of grade-5 students by mother's education (2016)



Source: Estimations from VNEN data.

Table 5.2. Math and literature score of grade-5 students by socio-economic characteristics (2016)

Group	Math grade in school	Literature grade in school	Math mark from the VNEN project	Literature mark from the VNEN project
Gender				
Male	7.7	7.5	13.9	18.9
Female	8.1	8.3	14.3	21.6
Income per capita of household per month				
Less than 2 million VND	7.5	7.5	11.5	18.1
Between 2 and under 4 million VND	8.0	7.9	14.1	20.6
Between 4 and under 6 million VND	8.3	8.2	16.7	22.4
Between 6 and under 8 million VND	8.6	8.5	18.2	23.4
More than 8 million VND	8.9	8.7	20.3	24.1
Region				
Red River Delta	8.4	8.2	21.1	23.7
Midlands and Northern	7.7	7.6	12.8	19.8
Northern and Coast	8.1	8.1	16.1	21.6
Central Highlands	7.8	7.6	13.2	18.1
Southeast	8.5	8.5	16.4	22.0
Mekong River Delta	8.2	8.1	11.9	19.5
Total	8.0	7.9	14.3	20.4

Source: Estimations from VNEN data.

Figure 5.3, Figure 5.4, and Table 5.2 present data regarding the math and literature score of grade-5 students, based on estimations from 2016 VNEN data. The data is disaggregated by the ethnicity of students, mother's education, and other socio-economic characteristics.

On the same scale with a maximum score of 30, the math score is likely to be lower than the literature score in all ethnic groups, particularly the Nung group who display the largest gap in scores between the two subjects, at 8.6 (see Figure 5.3). For both subjects, the scores widely vary across ethnic groups. To be specific, at the top of the ranking are students from the Kinh, Muong, Tay, and Nung groups, followed by those from the Thai and Dao groups, while students from the Khmer and H'Mong groups stand at the bottom.

By doing a literature review and fieldwork observation, the research team has sought to explain the **low performance of grade-5 students from the Khmer and H'Mong groups**, and to identify some of the reasons, including **language barriers and parents' low awareness** of the importance of education.

Box 5.1. The math and literature scores of H'Mong and Khmer grade-5 students are the lowest among all ethnic groups

> The low Math and Literature scores of H'Mong and Khmer grade-5 students on the 2016 VNEN exam can be partly explained by the language barrier they face. Students with a low proficiency of Vietnamese have difficulty comprehending and solving problems in exams [5]. Another possible reason is the parents' low awareness of the importance of education, in particular of children's schooling. H'Mong parents do not pay much attention to children's schooling and H'Mong children often drop out of school at an early age and are less likely to go on to high school.
>
> Besides, H'Mong children have limited use of the Vietnamese language in classes where a large proportion of students are from the H'Mong group. The research team's observations indicate that an ethnicity-diverse class environment (for example: students from many ethnic groups such as Kinh, Thai, Tay, Dao, and H'Mong) promotes the use of Vietnamese as a common language. Or in some cases, students are required by the teacher to speak Vietnamese in class to avoid isolating other groups of students. On the contrary, in a class environment where the majority of students are from the H'Mong group, students often communicate in their mother tongue (the H'Mong language). Khmer students also find themselves in a similar situation.
>
> To improve the situation, a number of schools have organised Vietnamese language classes for students from ethnic minorities. For example, in An Hiep Commune (Chau Thanh District, Soc Trang Province) where the majority of students are Khmer, Khmer students are offered 10 Vietnamese classes before the new school year begins (KII with the head of the primary school, An Hiep Commune, Chau Thanh District, Soc Trang Province).

The math and literature scores also vary according to the mother's education level (see Figure 5.4). Both scores increase remarkably as the mother's education improves. The math score of students whose mother has post-secondary education is three times that of students whose mother did not go to school or did not complete primary school. Similarly, the literature score of students whose mother has post-secondary education is twice that of students whose mother did not go to school or did not complete primary school. Also, the scores of children whose mothers are well educated nearly reach the maximum, at 24.1 and 26.2 out of 30 for math and literature, respectively.

The research team also found that **there is a positive correlation between students' scores and households' economic status**, as evidenced by the income per capita of households per month (see Table 5.2). To be specific, students from high-income households (whose income per capita per month is over 8 million VND) have significantly higher scores than students from low-income households (whose income per capita per month is below 2 million VND).

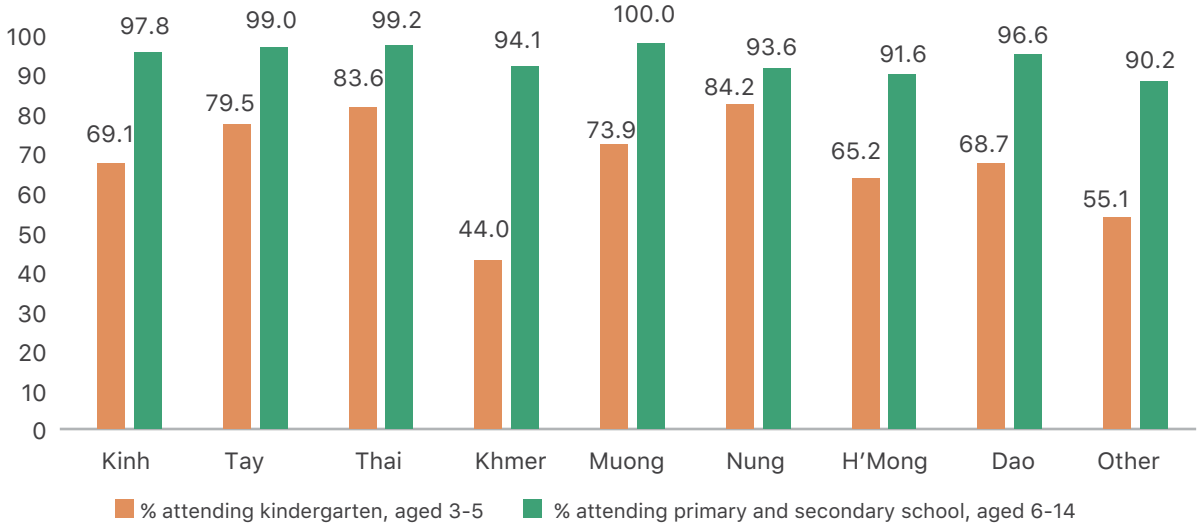
[5] The results from the 2015 survey on the socio-economic status of 53 ethnic minorities indicate that the proportion of people over 15 years old who can read and write the national language among the H'Mong and Khmer is low, at 48.1 percent and 71.2 percent, respectively. Noticeably, the H'Mong are ranked 51st out of 54 ethnic groups (MDRI, 2018).

There is also variation in both scores with respect to geographic regions. To be specific, the Red River Delta has the highest average score, followed by the Southeast region. The Midlands and Northern Mountains, Mekong River Delta, and Central Highlands rank lowest.

5.2. EDUCATIONAL ATTAINMENT

School enrolment: (a) kindergarten and (b) primary and secondary school

Figure 5.5. School enrolment by ethnic group, 2016 (%)



Source: Estimations from VHLSSs.

Figure 5.5 presents data regarding school enrolment rates in kindergarten and in primary and secondary school among children aged 3-14, disaggregated by ethnicity based on estimations from the 2016 VHLSS.

In general, the enrolment rate in kindergarten among children aged 3-5 is significantly lower than that in primary and secondary school among children aged 6-14. Regarding the enrolment rate in kindergarten, the rate varies widely across different ethnic groups. Noticeably, Nung, Thai, Tay, and Muong children have the largest enrolment rate, even larger than Kinh children. Dao children also display a high enrolment rate, almost the same as Kinh children. This is partly explained by the fact that the Nung, Thai, Tay, Muong, and Dao have attained a level of socio-economic development which is on par with the Kinh.

Meanwhile, Khmer children have the lowest enrolment rate, at less than 50%. Moreover, the percentage of out-of-school children among Khmer children under 5 years of age in urban areas is significantly larger than that of Khmer children under 5 years of age in rural areas, at 33.5% compared with 19.8% (UNICEF Viet Nam, 2016). This implies that despite living in urban areas with better living conditions, Khmer children under 5 years old still do not have as many advantages in learning as their peers in urban areas.

The research team has sought to account for the lower enrolment rate of Khmer children in kindergarten and through the literature review, has identified some of the reasons, one of which is the lack of awareness of the important role of early education among families and parents.

Box 5.2. The enrolment rate in kindergarten among Khmer children is very low, at less than 50%

The low enrolment rate in kindergarten among Khmer children can be attributed to the lack of awareness among families and parents of the important role of early education in enhancing children's school readiness. In many cases, such as in An Hiep Commune (Chau Thanh Cistrict, Soc Trang Province), the research team found that many parents move to cities in search of jobs and leave their children at home under their grandparents' care. Given that many school sites are far away from home, grandparents have difficulties taking children to school. In other cases, stay-at-home parents or work-at-home parents prefers to keep their children at home instead of taking them to school.

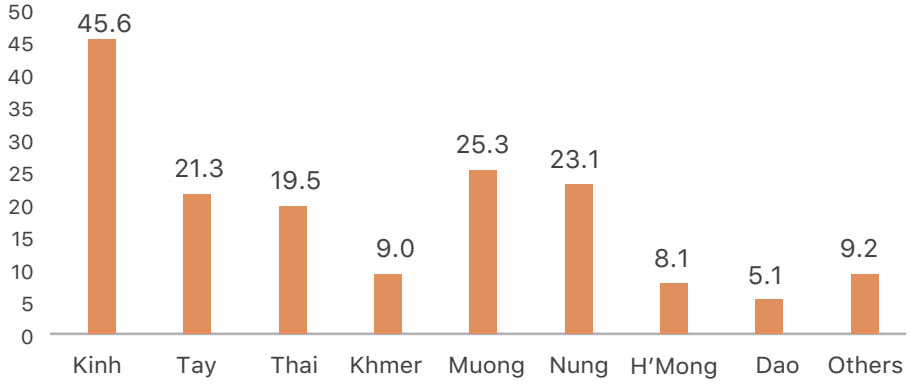
One of the objectives of early education is to promote the use of the Vietnamese language among young children, particularly children from ethnic minorities, to make sure that they are equipped with the basic language skills to complete early education and primary education, which serves as a foundation for them to pursue higher levels of education. Therefore, the low enrolment rate in kindergarten among Khmer children is an obstacle to achieve this objective, hence affecting children's academic performance in the future.

For the time being, in a number of provinces where the majority of the population are from the Khmer group, e.g. Bac Lieu and Vinh Long, activities are organised to promote school enrolment among ethnic minority children, including improving the quality of Vietnamese teaching in educational establishments, building the capacity of the management staff and teaching staff in kindergartens and primary schools, communication, socialization, and offering better pay to teachers of Vietnamese for children from ethnic minorities.

Regarding the enrolment rate in primary and secondary school, it is relatively high (at more than 90%) and does not vary much across ethnic groups. Noticeably, children from the Muong group have the largest enrolment rate, at 100%.

Proportion of people aged 18-22 attending college

Figure 5.6. Proportion of people aged 18-22 attending college, 2016 (%)



Source: Estimations from VHLSSs.

Figure 5.6 shows data regarding the proportion of people aged 18-22 attending college, disaggregated by ethnicity, based on estimations from the 2016 VHLSS.

It is clear that the **enrolment rate does vary considerably across different ethnic groups**. The Kinh ranks the highest, with approximately 45.6% of the population aged 18-22 attending college. They are followed by the Muong, Nung, and Tay with a percentage twice as small, ranging from 21.3% to 25.3%. People from the Khmer, H'Mong, and Dao groups have the lowest enrolment rate, below 10%.

School enrolment at all levels

Table 5.3. School enrolment rate by demographic and socio-economic characteristics, 2016

	% attending kindergarten, aged 3-5	% attending primary and secondary school, aged 6-14	% attending high school, aged 15-17	% attending college, aged 18-22
Gender				
Male	67.5	96.9	72.4	35.2
Female	69.7	97.2	81.8	42.9
Ethnicity				
Ethnic minorities	66.6	94.0	55.7	14.1
Kinh	69.1	97.8	82.2	45.6
Area				
Rural	65.9	96.6	73.2	33.6
Urban	74.8	98.0	87.2	51.8
Region				
Red River Delta	82.5	99.0	87.8	49.8
Midlands and Northern Mountains	80.9	96.9	68.8	24.8
Northern and Coastal Central	68.4	97.9	80.9	40.4
Central Highlands	55.4	93.6	64.0	34.8
Southeast	66.3	97.8	82.0	43.3
Mekong Delta	45.6	94.9	68.4	34.7
Education of hh. head				
Less than primary	53.2	93.6	51.6	17.7
Primary education	63.3	96.5	74.9	30.3
Lower secondary education	72.3	98.7	86.4	40.4
Upper secondary education	80.5	99.4	93.1	62.1
Post-secondary education	84.0	99.2	98.2	80.4
Poverty status				
Non-poor	71.4	98.0	80.5	43.1
Poor	53.1	91.8	49.3	4.9
Expenditure quintiles				
Poorest	54.1	93.5	54.0	9.0

	% attending kindergarten, aged 3-5	% attending primary and secondary school, aged 6-14	% attending high school, aged 15-17	% attending college, aged 18-22
Near poorest	65.8	97.3	74.1	25.9
Middle	70.9	98.5	80.1	37.8
Near richest	78.9	98.2	88.8	54.5
Richest	87.6	99.4	95.6	65.2
Total	68.6	97.0	77.0	39.1

Source: Estimations from VHLSSs.

Table 5.3 displays data regarding the enrolment rates at different levels, including kindergarten, primary school & secondary school, high school, and college, disaggregated by gender, ethnicity, geographic region, education level of the household head, and expenditure quintile, based on estimations from the 2016 VHLSS. At all four levels, women's enrolment rate is larger than men's enrolment rate and the gap is likely to increase at higher levels. This finding is also in agreement with the preliminary finding from the Population and Housing census 2019. The proportion of the population old enough to attend high school and currently enrolled in high school is 92.5% among women, higher than that among men (at 90.8%) (Do, 2019).

A noteworthy finding is that the **enrolment rate starts to drop at higher levels, including high school and college**. The research team sought to account for that and identified that early career orientation may be a reason.

Box 5.3. The enrolment rate in high school and at higher levels starts to drop

An obvious trend is that the enrolment rate in high school and at higher levels starts to drop in comparison with the enrolment rate in primary and secondary school. A possible explanation is the early career orientation programmes delivered by families and schools. After graduating from secondary school, students can decide whether to pursue higher education or stay at home, whether to participate in vocational training and then join the labour force, or to join the labour force without training.

The emergence of industrial zones and processing zones in local areas has created a huge demand for labour with secondary or high-school qualification. On the one hand, the labour demand meets the local supply, creating jobs for students after graduating from secondary school. On the other hand, the requirement of secondary or high-school qualification during their job application encourages students to complete secondary education.

In all three provinces where the research team conducted the qualitative study, local people and teachers stated that the enrolment rate in primary school and secondary school is relatively high (approximately 100%), but starts to drop after secondary school. A proportion of students pursue higher education or participate in vocational training, while others stay at home and start searching for jobs.

A prime example is in Hung Loi Commune (Yen Son District, Tuyen Quang Province): there are about 280 young adults working in mining, or industrial or processing zones, mostly in northern provinces (Source: KII with vice head of People's Committee, Hung Loi Commune, Yen Son District, Tuyen Quang Province). According to local teachers, a number of companies have approached high schools to offer career consultation and introduce vocational training classes to students.

The comparison between urban and rural areas shows that **urban areas have a significantly larger enrolment rate than rural areas**, in particular for college where the enrolment rate of people living in urban areas is 51.8%, 1.5 times as much as that in rural areas (at 33.6%). The Red River Delta and Southeast regions rank first with respect to enrolment in primary school and above, while at the bottom of the ranking are the Central Highlands and the Midlands and Northern Mountains.

The **enrolment rate bears a strong correlation with the education level of the household head and the household's economic status**. It is quite obvious that households whose heads have a higher education level (in particular those with post-secondary education) and rich households (in the 4th and 5th expenditure quintiles) have remarkably larger enrolment rate at all levels. Throughout the analysis of the measures of inequality in education and learning, these are two important factors in comparing and accounting for differences in educational data between population subgroups.

During the qualitative fieldwork, the research team explored the cases where poor households cannot afford to have all their children pursue their education, for example in Dak Lak Province.

Box 5.4. Because of poverty, many households cannot afford to have all children continue their education

The family of Mr Dung and Mrs Tuyet is on the list of near-poor households in Quang Hiep Commune, Cu M'gar District, Dak Lak Province. Mr Dung is originally from Quang Nam Province and Mrs Tuyet's hometown is in Quang Ngai Province. They moved to Dak Lak more than 20 years ago. Previously, they earned a living by working as hired labourers, construction workers, and picking coffee and pepper. The family owns more than a dozen pepper trees, so the harvest yield is not remarkable. They want to switch to growing coffee to increase their income, but do not have enough money to cover the initial investment costs such as land reclamation, irrigation systems, etc. In 2017, Mr Dung suffered from a heart attack and had to stay at home without doing heavy work. The main source of family income is Mrs Tuyet's small store in the market.

They have 4 children, 3 girls and 1 boy. The first two daughters dropped out of school after completing secondary education and have worked as workers in the garment and textile sector, earning money to support their parents. The third sister is in her last year of college and her youngest brother is in 8th grade. The sister was praised by her teachers at school for being academically excellent and encouraged to continue her studies. Therefore, the parents decided to let the first two children drop out of school to work to earn money to support the third child to continue her studies.

Source: KII with a female participant in FGD, Quang Hiep Commune, Cu M'gar District, Dak Lak Province

Educational attainment of people aged 25 and over

Table 5.4. Educational attainment by demographic and geographic characteristics, 2016

Group	% people with tertiary education (aged 25+)		Number of years of schooling (aged 25+)	
	VHLSS 2010	VHLSS 2016	VHLSS 2010	VHLSS 2016
Gender				
Male	9.8	12.3	8.3	8.7
Female	7.2	10.4	7.1	7.7
Ethnicity				
Ethnic minorities	2.4	4.0	4.9	5.5
Kinh	9.4	12.5	8.1	8.6
Ethnic groups				
Kinh	9.4	12.5	8.1	8.6
Tay	5.0	11.6	7.3	8.6
Thai	2.4	3.3	4.9	5.4
Khmer	3.2	1.7	3.5	3.6
Muong	1.7	3.3	6.5	7.1
Nung	1.9	6.4	5.4	6.8
H'Mong	0.0	0.9	1.3	2.4
Dao	0.0	1.1	2.6	3.5
Other	1.8	2.7	4.2	4.9
Urban/rural areas				
Rural	3.4	5.3	6.8	7.2
Urban	19.2	23.3	9.6	10.1
Regions				
Red River Delta	13.5	15.8	9.4	9.7
Midlands and Northern Mountains	5.0	8.9	6.9	7.5
Northern and Coastal Central	6.7	8.8	7.6	8.1
Central Highlands	5.2	10.4	7.0	7.8
Southeast	11.7	16.6	8.2	8.9
Mekong Delta	4.2	5.6	5.8	6.2
Total	8.5	11.3	7.7	8.2

Source: Estimations from VHLSSs.

Table 5.5. Educational attainment by socio-economic characteristics, 2016

	% people with tertiary education (aged 25+)		Number of years of schooling (aged 25+)	
	VHLSS 2010	VHLSS 2016	VHLSS 2010	VHLSS 2016
Education of hh. head				
Less than primary	1.1	1.5	3.6	3.8
Primary education	1.9	2.9	6.4	6.5
Lower secondary education	2.7	6.0	8.7	9.1
Upper secondary education	7.7	11.5	10.4	10.8
Post-secondary education	72.7	73.6	14.3	14.3
Poverty status				
Non-poor	10.2	12.2	8.3	8.5
Poor	0.4	0.4	4.8	4.2
Expenditure quintiles				
Poorest	0.4	0.8	4.8	5.1
Near poorest	0.9	3.6	6.3	6.9
Middle	3.2	6.3	7.3	7.9
Near richest	8.4	12.4	8.4	9.1
Richest	25.8	29.6	10.6	11.0
Total	8.5	11.3	7.7	8.2

Source: Estimations from VHLSSs.

Table 5.4 and Table 5.5 provide data regarding the educational attainment of the population aged 25 and over, disaggregated by demographic characteristics, and geographic and socio-economic characteristics, based on estimations from the 2016 VHLSS. The education attainment is measured by two indicators, namely the proportion of the population aged 25 and over with tertiary education and the average number of years of schooling among the population aged 25 and over.

Regarding the average number of years of schooling, based on estimations from the 2016 VHLSS, it is clear that the number of years of schooling of the female group is lower than that of their male peers, at 7.7 years in comparison with 8.7 years. This finding is noteworthy, given that the female enrolment rate at different levels of education is higher than that of their male peers, in particular the proportion of the population aged 18-22 attending college. This suggests a recent shift in education preference from men to women.

The comparison between ethnic groups shows that the Kinh, Tay, Muong, and Nung have the largest number of years of schooling, ranging from 6.8 years to 8.6 years. These four groups also reach high values of educational measures. On the contrary, the Khmer, H'Mong, and Dao stand at the bottom of the ranking regarding the average number of years of schooling.

The average number of years of schooling also widely varies between people living in urban and rural areas and across different geographic regions. To be specific, the average number of years of schooling among people living in urban areas is 10.1 years, which is 1.5 times that of people living in rural areas (at 7.2 years). This means that on average a person living in an urban area is likely to attend school almost 3 years longer than a person living in a rural area.

People living in the Red River Delta and Southeast regions have the largest average number of years of schooling, while the Central Highlands and the Mekong Delta have the lowest number. For example, a person living in the Mekong Delta may spend nearly 4 fewer years than a person living in the Red River Delta attending school. This fact can be attributed to the wide variation in the enrolment rate at different levels of education between these regions.

Similar to the enrolment rate at different levels of education, the average number of years of schooling also has a positive correlation with the household head's education level and the household's economic status. For instance, a person from the richest households may attend school 6 years more than a person from the poorest households. People whose household head has post-secondary education are more likely to have post-secondary education (with an average number of years of schooling equal to 14.3 years). Meanwhile, people whose household head did not go to school or did not complete primary school are likely not to complete primary school (with an average number of years of schooling equal to 3.8 years).

Spending on the education of students

Table 5.6. Spending on the education of students by demographic and geographic characteristics

Group	Average tuition fees (thousand VND/year/student, current price)		Other education expenditure (thousand VND/year/student, current price)	
	VHLSS 2010	VHLSS 2016	VHLSS 2010	VHLSS 2016
Gender				
Male	1,218	2,128	1,721	2,868
Female	1,238	2,040	1,678	3,133
Ethnicity				
Ethnic minorities	239	544	643	1,181
Kinh	1,402	2,415	1,887	3,390
Ethnic group				
Kinh	1,402	2,415	1,887	3,390
Tay	439	874	1,129	1,934
Thai	205	461	451	1,153
Khmer	34	425	411	845
Muong	287	618	582	2,539
Nung	215	561	796	1,642
H'Mong	65	107	176	368
Dao	96	345	350	707
Others	258	729	676	1,031
Urban/rural areas				
Rural	654	1,141	1,361	2,423
Urban	2,549	4,079	2,480	4,218

Group	Average tuition fees (thousand VND/year/student, current price)		Other education expenditure (thousand VND/year/student, current price)	
	VHLSS 2010	VHLSS 2016	VHLSS 2010	VHLSS 2016
Regions				
Red River Delta	1,151	2,589	2,166	4,459
Midlands and Northern Mountains	457	806	1,028	1,659
Northern and Coastal Central	901	1,583	1,618	2,538
Central Highlands	679	1,271	1,446	2,832
Southeast	3,451	4,654	2,210	3,579
Mekong Delta	640	1,222	1,312	2,341
Total	1,228	2,084	1,700	2,999

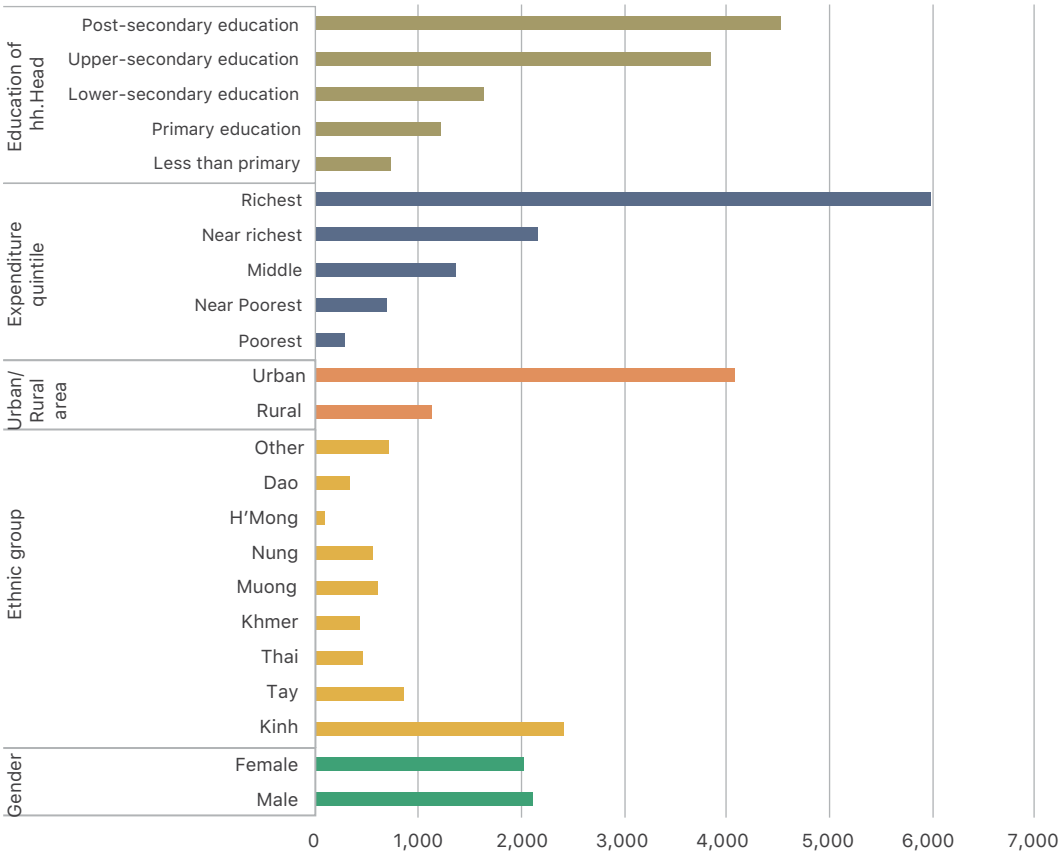
Source: Estimations from VHLSSs.

Table 5.7. Spending on the education of students by socio-economic characteristics

Group	Average tuition fees (thousand VND/year/student, current price)		Other education expenditure (thousand VND/year/student, current price)	
	VHLSS 2010	VHLSS 2016	VHLSS 2010	VHLSS 2016
Education of hh. Head				
Less than primary	393	738	907	1,599
Primary education	723	1,213	1,288	2,268
Lower secondary education	950	1,651	1,679	3,045
Upper secondary education	1,969	3,844	2,398	4,162
Post-secondary education	3,896	4,525	3,140	5,117
Poverty status				
Non-poor	1,506	2,322	2,018	3,298
Poor	141	181	460	606
Expenditure quintiles				
Poorest	138	293	455	871
Near poorest	408	703	986	1,755
Middle	712	1,381	1,476	2,585
Near richest	1,172	2,171	2,203	3,890
Richest	3,560	5,977	3,277	6,002
Total	1,228	2,084	1,700	2,999

Source: Estimations from VHLSSs.

Figure 5.7. Average tuition fees, 2016



Unit: thousand VND/year/student, current price

Source: Estimations from VHLSSs

Table 5.7 displays data regarding the spending on the education of students (unit: thousand VND/year/student, current price), disaggregated by demographic characteristics, and geographic and socio-economic characteristics, based on estimations from the 2010 and 2016 VHLSSs.

Spending on education comprises tuition fees and other education expenditures, which include financial contributions to school and class (e.g. construction fund), parents' fund, class budget, clothing as per regulation (e.g. uniform), stationery (e.g. paper, notebook, pen, school bag, etc), tutor fees and other expenses (e.g. exam retake fees, travel expenses, accommodation, health insurance, etc). Figure 5.7 show select figures regarding the average tuition fees and other education expenditures in 2016, disaggregated by key demographic and socio-economic characteristics.

Considering the estimations from the 2016 VHLSS, the average tuition fees are nearly 2.1 million VND/year/student and the other education expenditures are approximately 3 million VND/year/student. The **average tuition fees for male students are higher than those for female students, while the amount of other education expenditures for male students is less than those for female students**, even though the gap between them is negligible.

A noteworthy finding is that there is a **significant difference in spending on the education of students living in urban and rural areas**, which can be partly explained by the **co-existence of public schools and private schools**, particularly in urban area.

Box 5.5. There is a significant difference in the spending on the education of students between urban and rural areas

Besides ethnicity, the household's economic status, and the household head's education level, the spending on the education of students (including tuition fees and other education expenditures) widely varies between urban and rural areas.

To be specific, estimations from the 2016 VHLSS show that the average tuition fees for students living in urban areas is about 4.1 million VND/year/student, nearly four times as much as that of students living in urban areas (about 1.1 million VND/year/student). Regarding other education expenditures, the average amount spent for students in urban areas is 4.2 million VND/year/student, nearly twice as much as that for students in rural areas (2.4 million VND/year/student).

One reason for the discrepancy in the spending on education between the two areas is the co-existence of public schools and private schools in urban areas, so that parents in urban areas have more choice of schools for their children. Private schools are established to meet parents' demand, mostly rich parents' need for a better quality learning environment, and also to share the work burden with public schools. According to the observations of the research team in Quang Hiep Commune (Cu M'gar District, Dak Lak Province), there are three private preschool classes in addition to one public kindergarten. The three classes are opened to meet parents' demand for clean and tidy classes with a small number of students nearby.

"I chose to send my grandchild to the private preschool class because the first thing is it is near my house, the second thing is the teacher there is very considerate."

(Female FGD – Quang Hiep Commune, Cu M'gar District, Dak Lak Province)

"(The private preschool class) works seriously. The food for the children always follows the menu. Previously there was only one school (public kindergarten) so parents had no option but to send their children there. Now there are many private school branches which share the workload with the public kindergarten. A crowded public kindergarten would not manage to give good care and good nutrition to children."

(Female FGD – Quang Hiep Commune, Cu M'gar District, Dak Lak Province)

Usually the tuition fees in private schools are higher than those in public schools, which contributes to the fact that spending on education in urban areas is higher than that in rural areas.

The spending on the education of students also widely varies across ethnic groups. To be specific, the **average tuition fees for Kinh students are 2.4 million VND/year/student, five times as much as those for students from other ethnic groups** (544 thousand VND/year/student). Likewise, the other **education expenditures for Kinh students are 3.4 million VND/year/student, three times as much as those for students from other ethnic groups** (approximately 1.2 million VND/year/student).

Spending on education is a measure of a household's financial investment in children's education and could possibly be an explanatory factor of children's academic performance, as evidenced by the enrolment at all levels, the average number of years of schooling, and the proportion of people aged 25 and over with tertiary education. Also, spending on education has a positive correlation with a household's economic status and the household head's education level. Vu (2012) indicates that the determinants of household spending on education include the household income and the household head's education level or professional attainment. Besides, households whose children go to primary, secondary, and high school spend more on education than households whose children go to kindergarten or attend college.

Spending on other training activities

Table 5.8. Spending on other training activities by demographic and geographic characteristics

Group	% with spending on other education activities (aged 18-30)		Expenditure on other education activities (aged 18-30) (thousand VND/year/trainee)	
	VHLSS 2010	VHLSS 2016	VHLSS 2010	VHLSS 2016
Gender				
Male	5.0	3.9	2,511	4,353
Female	6.3	5.3	1,941	4,046
Ethnicity				
Ethnic minorities	1.3	1.0	1,454	3,151
Kinh	6.5	5.6	2,224	4,221
Urban/Rural areas				
Rural	4.4	3.7	1,654	2,742
Urban	8.6	6.5	2,861	5,892
Regions				
Red River Delta	5.9	5.5	2,829	3,673
Midlands and Northern Mountains	1.7	1.7	1,931	4,106
Northern and Coastal Central	6.3	5.3	1,093	2,807
Central Highlands	9.5	3.4	2,073	3,375
Southeast	9.0	6.4	2,974	6,837
Mekong Delta	3.2	3.7	1,507	2,891
Total	5.7	4.6	2,194	4,175

Source: Estimations from VHLSSs.

Table 5.9. Spending on other training activities by socio-economic characteristics

Group	% with spending on other education activities (aged 18-30)		Expenditure on other education activities (aged 18-30) (thousand VND/year/trainee)	
	VHLSS 2010	VHLSS 2016	VHLSS 2010	VHLSS 2016
Education of hh. Head				
Less than primary	2.2	1.7	1,591	3,587
Primary education	4.2	3.4	1,533	2,685
Lower secondary education	6.2	4.2	1,767	2,708
Upper secondary education	8.5	7.2	2,686	5,496
Post-secondary education	11.9	11.8	3,276	5,915
Poverty status				
Non-poor	6.8	5.1	2,213	4,206
Poor	0.6	0.4	1,194	632
Expenditure quintiles				
Poorest	0.5	0.7	1,256	828
Near poorest	2.8	1.5	1,276	2,105
Middle	5.2	4.2	1,233	1,883
Near richest	6.6	6.4	1,456	2,819
Richest	12.2	10.0	3,241	6,474
Total	5.7	4.6	2,194	4,175

Source: Estimations from VHLSSs.

Table 5.8 and Table 5.9 present data regarding spending on other training activities among the adult population aged 18-30 (unit: thousand VND/year/trainee), disaggregated by demographic characteristics and by geographic and socio-economic characteristics, estimated from the 2016 VHLSS. Other training activities involve foreign language study, fast typing, hair-dressing, make-up, etc. Those activities represent certain forms of adult learning for the purpose of capacity building, skill improvement, and professional development to reach higher levels on the career ladder. The dataset has a drawback: training activities that are cost-free for individuals, for example internal training in the workplace or external training sponsored by the employer, are not counted.

In general, about 4.6 percent of the adult population aged 18-30 spend on other training activities, with an average of 4.2 million VND/year/trainee.

Women are more likely to spend on other training activities but spend less than men, even though the gap between the two genders is not remarkable. The Kinh are significantly more likely to spend and spend more than people from other ethnic groups. Also, **people in urban areas are more likely to spend and spend more on other training activities** than people in rural areas. Their expenditure is double that of people in rural areas, at 5.9 million VND/year/trainee in comparison with 2.7 million/year/trainee.

Similar to the spending on the education of students, the proportion of the adult population aged 18-30 with expenditure and the expenditure amount increase as the household head's education level and the household's economic status improve. This finding is also in agreement with the UNESCO report entitled *Unequal chances to participate in adult learning: international perspectives* (Desjardins, R., Rubenson, K. and Milana, M., 2006). The report presents the results of the International Adult Literacy Survey conducted in 18 OECD countries between 1994 and 1998 which indicate that participation in adult learning has a strong relationship with the parents' education level, as well as with the access to these learning opportunities.

5.3. ACCESS TO INFORMATION AND TECHNOLOGY NECESSARY TO PARTICIPATE IN SOCIETY

Proportion of people living in a household with a telephone

Table 5.10. Proportion of people living in a household with a telephone by demographic characteristics (%)

Group	VHLSS 2010	VHLSS 2012	VHLSS 2014	VHLSS 2016
Ethnicity				
Ethnic minorities	52.3	61.8	76.3	84.6
Kinh	86.7	91.9	90.0	96.5
Ethnic groups				
Kinh	86.7	91.9	90.0	96.5
Tay	71.3	80.5	90.9	94.9
Thai	43.6	44.3	76.7	86.0
Khmer	49.4	69.6	84.2	90.9
Muong	63.0	74.2	84.6	95.9
Nung	65.5	70.6	93.2	95.6
H'Mong	18.9	25.0	49.4	73.4
Dao	48.8	65.8	78.1	95.3
Others	49.6	63.9	68.9	74.4
Area				
Urban	77.1	83.8	88.8	92.8
Rural	91.3	94.9	86.3	97.9
Regions				
Red River Delta	87.2	91.9	94.4	95.5
Midlands and Northern Mountains	68.8	74.3	86.7	92.6
Northern and Coastal Central	79.0	84.8	90.5	92.2
Central Highlands	79.4	84.7	87.8	88.0
Southeast	88.9	93.6	70.1	98.4
Mekong Delta	79.8	88.6	93.9	96.1
Total	81.3	87.1	87.9	94.5

Source: Estimations from VHLSSs.

Table 5.11. Proportion of people living in a household with a telephone by socio-economic characteristics (%)

Group	VHLSS 2010	VHLSS 2012	VHLSS 2014	VHLSS 2016
Education of hh. Head				
Less than primary	62.0	73.6	80.6	87.2
Primary education	80.9	86.7	87.6	94.5
Lower secondary education	87.1	90.7	91.6	96.4
Upper secondary education	93.2	95.5	92.2	98.3
Post-secondary education	96.0	98.8	87.9	98.5
Expenditure quintile				
Poorest	50.3	62.7	77.7	83.3
Second	78.0	86.6	90.8	94.9
Middle	88.4	92.6	94.0	97.4
Fourth	93.1	95.9	89.1	97.8
Richest	96.7	97.8	88.0	98.9
Total	81.3	87.1	87.9	94.5

Source: Estimations from VHLSSs.

Table 5.10 and Table 5.11 display data regarding the proportion of the population living in a household with a telephone. The data is disaggregated by demographic characteristics, geographic and socio-economic characteristics, based on estimations from the 2010-2016 VHLSSs. The proportion has grown steadily over the years since 2010, reaching 94.5 percent in 2016. There is no significant variation in the proportion across ethnic groups, between urban and rural groups, and across households of different economic statuses. The telephone has become a popular means of communication and information exchange.

Besides telephones, the access to mobile phones, especially smartphones and the Internet, has been growing in Vietnam at an increased speed. According to "The State of Mobile in Rural Vietnam 2018/2019 Report" led by the Mobile Marketing Association, **Vietnam is a mobile-first market**, with nearly all Internet users owning a smartphone and ¾ using it as their preferred connection device. The market has over 51 million smartphones, representing over 80% of the population aged 15 and older.

In rural areas, mobiles are the primary digital platform. 89% of the population have mobile phones, among whom 68% own a smartphone. On average, the rural Vietnamese demographic spends three hours connected to the Internet each day.

In the qualitative fieldwork, the research team also realized the growing popularity of mobile phones and the Internet among the local population, especially among the working-age population.

Box 5.6. The access to mobile phones and the Internet is increasingly growing

Besides telephones, mobile phones have become a popular means of communication and information exchange. The research team found that in the three locations where we conducted the qualitative study, almost everyone in working age uses mobile phones, in some cases smartphones.

In Quang Hiep Commune (Cu M'gar District, Dak Lak Province), mobile phones are used by village leaders to inform residents of village meetings or by school administrators to provide important information to parents.

Taking advantage of the popularity of mobile phones, in An Hiep Commune (Chau Thanh District, Soc Trang Province), people are provided with key chains printed with a hotline number to report child abuse cases.

Depending on a household's economic status and household demand, a few households have a wifi Internet connection, while others use 3G technology to access the Internet on their smartphones. Internet connection has helped to equalize access to information and other sources (for example: online/virtual courses) at low cost. However, to effectively access and exploit information from the Internet, it is important that users have certain technical skills. This could be an obstacle to students from poor households.

The access to mobile phones and the Internet has become widespread and grown at an increased speed, bringing positive impacts by transforming ways of communication and information exchange.

5.4. ANALYSIS OF THE DRIVERS OF INEQUALITIES IN EDUCATION AND LEARNING

The analysis indicates that inequality in education and learning occurs throughout life, starting from early childhood until adulthood. People from ethnic minorities, the inhabitants of rural areas and of the Midlands and Northern Mountains and Central Highlands, people from poor families, and people whose parents have a low education level suffer the most from inequalities. Children in those vulnerable groups have limited access to ECD programs and ECD objects (such as purchased toys or comic books), and therefore, they are less likely to have healthy cognitive development, as evidenced by their low ECD index. When growing up and attending primary school, these children tend to perform poorly in standard exams, as evidenced by their low scores on math and literature tests. Students from ethnic minorities specifically face a language barrier. Given that students from vulnerable groups are less likely to enrol at different levels of education, ranging from primary school to high school, they have a lower number of years of schooling. And they also stand a lower chance of attending and graduating from college or university with a tertiary education.

Regarding gender inequality, the **enrolment of girls and women at different levels of education, from primary school to college/university is higher than that of their male peers.** However, **female adults still have a significantly lower number of years of schooling than male adults**, by approximately 1 year. This suggests a recent shift in education preference from men to women.

The drivers of inequalities in education and learning help to explain why some individuals have very low levels of education, while others are highly educated. The fact that these inequalities are often

associated with differences in the family background of individuals is key to understanding that they are not largely driven by differences in ability. While **inequalities in parental resources** are an important determinant of education and learning inequalities, the education system can be designed to limit the impact of differences in family background. By doing a literature review and other analyses including a review of qualitative findings and a supply-demand analysis, the research team has identified six main driver categories.

Unequal access to high-quality education

Even though Vietnam has launched many education development policies over the past decade, especially for remote areas and those populated with ethnic minorities, their implementation has been inadequate due to limited resources. Moreover, the policy design has not been well customized to local characteristics and the investment in disadvantaged areas is still limited.

One example of a locally inappropriate policy would be the one supporting students and schools in extremely disadvantaged villages and communes, as per Decree no.116/2016/ND-CP dated 18 July 2016. The provision of rice to schools and students twice a year is inappropriate as the large amount of rice received each time makes it hard to maintain the quality over months. In addition, the policy does not cover the cost of the transportation, delivery, and handling of the rice from the district centre to the schools, which is a cost burden for the schools.

The policy providing lunch stipends to children aged 3-5 from households in extremely disadvantaged villages and communes in areas populated with ethnic minorities or coastal and island areas has, to some extent, generated inequality. The stipend is only provided to children aged 3-5 attending preschools, while children from other age groups also going to preschool do not receive the stipend. In addition, the regulation that the beneficiaries must have a household registration in the local area prevents migrant children from benefitting from the policy.

Also, the remuneration package for teaching staff in those areas has not been adequate to keep them there and devote themselves to education development. The rotation policy of teachers between advantaged and disadvantaged areas has resulted in many difficulties for both areas. Even though teachers may have the same qualifications, the difference in teaching environment has caused disparities in teaching methods and delivery modes between the two areas. In such cases, teachers have difficulties adapting to the new teaching environment.

In addition, the discrepancy in the quality of infrastructure, facilities, equipment, and teaching activities between the main school site and satellite school sites is also evidence of inequality. At satellite school sites, the learning environment is often substandard; teachers and students are quite isolated from the activities at the main school site; teachers have very few opportunities to improve their professional skills. Therefore, the quality of teaching at satellite school sites is often lower than that at the main school site. Satellite school sites also have difficulties in distributing, using, and maintaining school teaching equipment.

> *"Students at the main school site enjoy better studying conditions and participate in more learning activities so they perform a bit better than students at satellite sites. Since the satellite sites are far away from the main site, 13 kilometres at the furthest, students there are less likely to participate in collective activities. To some extent, in terms of communication skills, students there are more reserved than students at the main site."*
>
> (KII with head of primary school – Hung Loi Commune, Yen Son District, Tuyen Quang Province)

> *"The main school site and satellite sites are, in terms of the quality of the teaching staff, similar. There is no gap in the sense that teachers at the main site are more qualified than those at the satellite sites. However, in reality, in terms of infrastructure and facilities, the main school site always outperforms the satellite sites. Why? Because for one thing, the main school site has a computer room and a swimming pool, while the satellite sites don't."*
>
> (KII with head of primary school – Quang Hiep Commune, Cu M'gar District, Dak Lak Province)

This finding is in agreement with the results from another study by the research team in 5 districts of Lao Cai Province between April and May 2019. In the study, the team assessed the availability of basic school facilities in 84 primary school sites (including both the main site and satellite sites), such as a healthcare room, library, electric lighting, and/or electric fans. The results show that the percentage of main sites having such facilities is higher than that of satellite sites. In particular, **healthcare rooms and libraries are two rarest facilities at satellite sites and students there have limited access** to them.

Schools located in areas where the majority of the population belong to ethnic minorities have diverse forms of organisation, for example village-based classes, classes with students from different grades, from normal secondary school to inter-secondary school, boarding school, or semi-boarding school. These are the reasons for the discrepancy in the quality of the education services between classes in the same school or between schools in the same commune.

These discrepancies result in discrepancies in students' academic performance between the main school site and satellite school sites. According to the study by the research team in 5 districts of Lao Cai Province between April and May 2019, **primary school students at the main school site outperformed students at the satellite sites in math and literature**, as evidenced by their test scores.

For the purpose of bridging the gap between the main school site and satellite school sites, in many remote areas and areas populated with ethnic minorities, the school network has been reorganised by removing or merging satellite sites. However, the implementation of the plan has faced many challenges, one of which is the widespread dispersion of satellite schools, the great distance between school sites, and inconvenient travelling. Removing and merging satellite school sites may lead to many students in remote areas dropping out of school. Therefore, for the existing satellite school sites, the merging option does not seem feasible and the alternative solution is to improve the infrastructure to meet students' demand.

At the same time, the emergence of private schools with higher average tuition fees than public schools also contributes to disparities in access to quality education among students living in households of different economic statuses. According to *The Economist*, Vietnam probably has the world's fastest-growing private-school sector ("A class apart," 2019). These private educational establishments are often located in major cities.

Harmful social and cultural norms that affect access to education and learning

The recent shift in **education preference from men to women**, as suggested by the analysis, implies that gender stereotypes are being phased out, although they still exist in some remote and ethnic minority areas. **The cultural practices and perceptions of some ethnic minorities have a negative impact on children's access to education and learning**. For example, H'Mong people do not fully appreciate the value of education so that H'Mong children often drop out of school at an early age and rarely go to high school. The practice of child marriage in some ethnic groups is also the reason why pupils, especially girls, have to drop out of school and fail to pursue higher education. According

to the preliminary results of the Population and Housing Census in 2019, the Midlands and Northern Mountains and the Central Highlands are the two regions with the highest percentage of women aged 20-24 getting married before 18, at 21.5% and 18.1%, respectively. The percentage has not decreased much in the past 5 years (UNFPA, 2019). These two regions are characterized by a large proportion of population belonging to ethnic minorities.

Box 5.7. The perceptions of certain ethnic groups has a negative impact on children's access to education and learning

> *"The issue with parents from certain ethnic groups is that some of them do not have the appropriate perception towards the role of education for their children. I'm not saying that every parent from ethnic minorities has an inappropriate perception, but some of them think that children need to complete only primary or secondary education to know how to read and write. If their children make little academic progress, they will let the children drop out of school to help them in the fields."*
>
> (KII with head of primary school – Quang Hiep Commune, Cu M'gar District, Dak Lak Province)
>
> *"The H'Mong group has a perception that is a bit different from other ethnic groups in the locality. Propaganda has been on-going to emphasize the importance of education. However, H'Mong children often drop out of school after finishing secondary education and not many go to high school. Because H'Mong people think that this age is good to start working. A small number of H'Mong families, in particular rich ones, encourage their children to continue their education, but the children themselves do not want to go to school."*
>
> (KII with head of primary school – Hung Loi Commune, Yen Son District, Tuyen Quang Province)

Lack of provision for special educational needs

In Vietnam, specialized education for children with disabilities and children with learning difficulties is referred to as special education. In the seminar on "Education for children with developmental disorders" held on October 31, 2017, the Deputy Minister of Education and Training Nguyen Thi Nghia said, "Currently, Vietnam has about 1.5 million children with disabilities, a large proportion of whom are children with developmental disorders." This large number has been a challenge for the education sector with regards to how to educate them and help them integrate into the community.

On the supply side, training for the profession of special education has been provided by a number of colleges and universities in Vietnam since 2000. Those colleges and universities also collaborate with foreign universities to open short-term training courses in the summer for teaching staff in special schools (specialized schools for children with disabilities and children with learning difficulties). In addition, there are also short training sessions in the form of customer support delivered by providers of hearing aids to teachers and parents in special schools.

According to Associate Professor Dr. Nguyen Xuan Hai, Vietnam needs more than 1 million qualified special education teachers to meet the demand for inclusive education for children with disabilities and children with learning difficulties at three levels of education, including preschool, primary school,

and secondary school (CED, 2017). The question of whether the qualification is adequate to fulfill the teaching tasks or to perform paediatric rehabilitation remains open. Thus, it can be said that there is a lack in both quantity and quality of teaching staff in special education.

In addition, the education and training in special education has been confined to teachers in special schools. Teachers in normal schools do not have the opportunity to access such education and training and therefore, normal schools are reluctant to admit students with disabilities and students with learning difficulties. According to a survey conducted by The Centre for Research and Education of the Deaf and Hard of Hearing (CED) in 2012 with 82 teachers working with hearing-impaired students in normal schools in rural and urban districts of Ho Chi Minh City, nearly a quarter of teachers have difficulties communicating with students; a similar percentage of teachers do not understand students' psychology and lack experience in working with such students.

Unequal access to early childhood development opportunities

Parents' awareness of the importance of early childhood development (ECD) for their children's future health, cognition, behavioural development, and learning, as well as of their own role in ECD has been limited and depends heavily on their education. This explains the inequality between children in accessing nutrition, stimulation, nurturing, and learning appropriate for their age, as evidenced by the ECD index, the enrolment rate in kindergarten, and the proportion of children who have purchased toys.

In addition, as per the analysis above, the co-existence of public and private schools also contributes to disparities in the access to ECD opportunities among children from households of different economic statuses.

Unequal access to career guidance, vocational and technical training, apprenticeships, and internships

The development of professional skills and access to vocational activities and learning opportunities to meet the demand of the labour market are important factors that determine the outcome of one's education. Therefore, education and vocational training require large investments in infrastructure, including the education system and vocational training institutions, and budget investment, as well as a comprehensive supporting policy framework.

Currently, between advantaged and disadvantaged areas, there is inequality in the availability and quality of vocational training, which results in disparities among students in accessing such training, particularly students graduating from secondary school and high school and in search of vocational training, apprenticeships, internship opportunities, etc.

As of 31 December 2018, there were 1,954 vocational training institutions in Vietnam, including 394 colleges (307 public colleges, 83 private colleges, and 4 foreign-invested colleges), 515 professional secondary schools (295 public schools, 219 private schools, and 1 foreign-invested school), and 1,045 vocational training institutions (697 public institutions, 346 private institutions, and 1 foreign-invested institution).

Table 5.12. Number of vocational training institutions in Vietnam by region (as of 31/12/2018)

No.	Region	Total	College		Professional secondary school		Vocational training institutions	
			Total	Of which: Public colleges	Total	Of which: Public schools	Total	Of which: Public institutions
	Total	1,954	394	307	515	295	1,045	697
1	Red River Delta	589	140	104	184	77	265	165
2	Midlands and Northern Mountains	305	50	47	56	34	199	127
3	Northern and Coastal Central	406	81	59	101	70	224	157
4	Central Highlands	105	13	13	18	13	74	48
5	Southeast	295	72	48	95	51	128	70
6	Mekong Delta	245	38	36	65	50	142	130

Source: Truong, 2019

According to Table 5.12, the majority of vocational training institutions are located in the Red River Delta region (accounting for 30%), followed by the Northern and Coastal Central region (making up 20.7%), and Southeast region (equivalent to 15%). The Central Highlands have the lowest number of vocational training institutions (5.4%).

Even though there has been an increase in the state budget spent on vocational training in recent years, it has not been adequate to meet the requirements and the objectives set. Many provinces have not yet given priority to investment in vocational training. Or to put it differently, the investment is allocated to many professions instead of confined to a limited number of professions with local advantages.

Unequal access to books, technology, and the Internet

Inequality in access to knowledge in the form of writing, for example books and magazines, does exist. A prime example is the lack of libraries at satellite school sites compared with the main site, hence creating a barrier for students at satellite sites to access knowledge and develop a reading culture.

The fast development of technology, accompanied by the increasingly widespread connection to the Internet, has bridged the gap in the access and exchange of knowledge among population subgroups, especially among young people and working-age people. Thereby, it contributes to reducing the inequality in access to other sources of information and resources (for example, online/virtual courses) at a low cost. However, in order to effectively access and exploit information from the Internet, certain computer skills are required. This may be an obstacle for students from poor households.

CHAPTER

6/7

INEQUALITY IN PARTICIPATION, INFLUENCE AND VOICE

Inequality in participation can potentially perpetuate the cycle of inequality since disadvantaged groups do not have enough opportunities to participate in the important decision-making process in their locality, leading to intergenerational inequality that could otherwise be avoided

The capability to participate in decision-making, and have a voice and influence affects the political, social, and family spheres of life. At the level of social/political participation, individuals from different groups have different degrees of participation, which may result in inequalities of influence. Some individuals may have 'too much' influence, which leads to a negative effect on the capacities of people who have 'too little' influence. At the micro-level, it is recognised that unequal influence and power also exist in families, which leads to forms of gender domination, mainly by men, in decision-making.

There are different forms of participation which can be assessed and analysed including the participation in democratic processes (voting), the representation in the national and local government of different groups, the ability to join workplace associations and community action groups, and the involvement in family decision-making. Based on the systematically surveyed data obtained from the Vietnam Provincial Governance and Public Administration Performance Index (PAPI) and the qualitative research in 3 provinces of Vietnam, we can assess inequality in people's participation, which is not limited to the gender aspect, but also the participation of various groups, such as people from different areas, or with different levels of education and wealth. The assessment is then used to explain the influence over the democratic and other decision-making processes at the national and local levels. Besides, we can analyse the perception of the right to political and public participation.

6.1. POLITICAL PARTICIPATION AND POLITICAL ACTIVITY

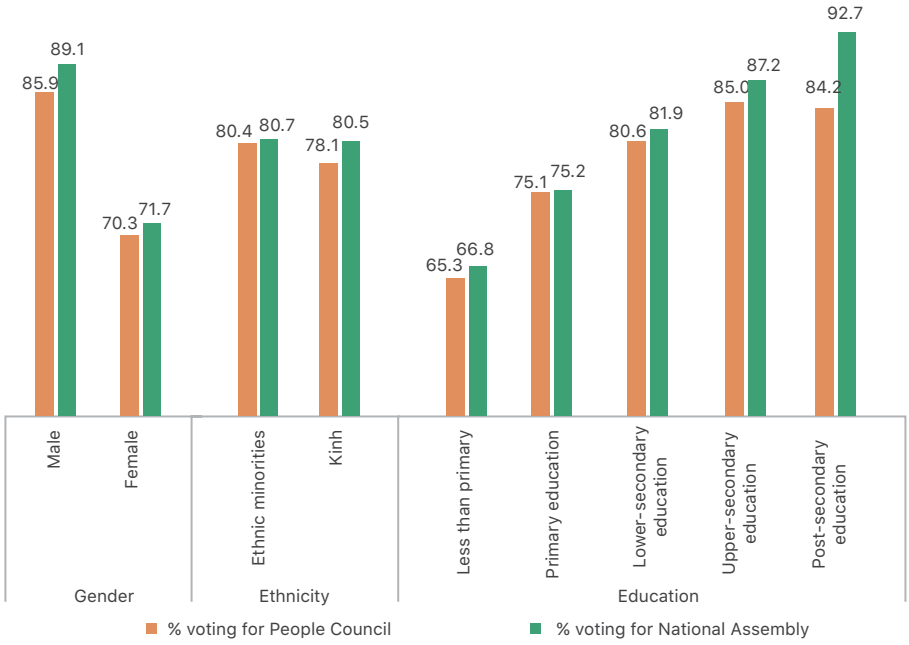
Inequality in voter turnout in national or local elections

Inequality in political participation and political activity refers to the disparity in the opportunity of different population groups to raise their voices, take part in the policy-making process, and access credited sources of information. Such inequality leads to the needs of disadvantaged groups in society remaining unmet.

The **inequality in participation of social groups is reflected in the limited access of vulnerable groups to information about laws, elections, services, etc., with insufficient space to speak up about their legitimate rights**. Since their problems have not been fully addressed, their rights have not been enshrined in the institutions or fully reflected in civil regulations and legal documents, resulting in a lack of faith in and apathy towards community activities.

The inequality in political participation is examined by comparing the voter turnout by population group in the recent People's Council and National Assembly elections. The PAPI data in 2018 reveals that the percentages of Kinh people (ethnic majority) and ethnic minorities voting for their representatives at the local level (People's Council) and the national level (National Assembly) are similar – about 80% (see Figure 6.1). Disparities come to light when comparing the voter turnout by educational attainment and gender. Voter turnout rates tend to grow proportionally with the education level, meaning that the percentage of people who vote is greater for the groups with a higher educational attainment. Indeed, the proportion of individuals who have completed upper secondary and post-secondary education is 20-26 percentage points higher than that of those who never completed primary education. While 86%-89% of men voted in the recent elections, the figure for women is only 70-72%. The gender inequality is well illustrated by the difference of about 17 percentage points between men's and women's turnout.

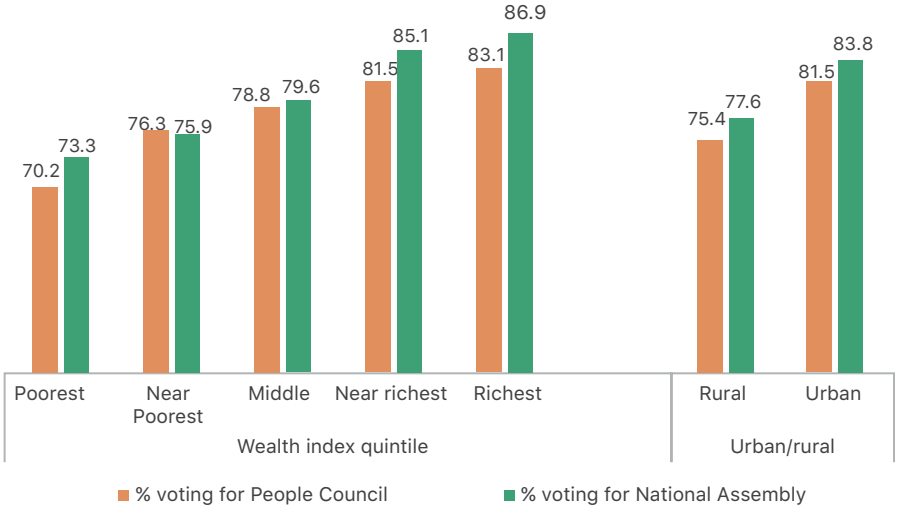
Figure 6.1. Proportion of individuals voting in the recent election by gender, ethnic group, and education (%)



Source: Estimations from the PAPI surveys.

Similarly, political participation is unequal for people from different income groups (see Figure 6.2). In 2018, among the richest, the voter turnout rates were 83% in the People's Council election and 87% in the National Assembly election, while the figures for the poorest were 70% and 73%, respectively. The rates increase with the income level. There is also a difference of about 6 percentage points between the turnout rates in urban and rural areas in the two elections, as urban residents are more active in practicing their voting rights. It is noticeable that the voter turnout is always higher in the National Assembly election (national level) than in the People's Council election (local level). This might be due to the fact that people are more aware of the importance of the National Assembly on account of a broad communication campaign during the election.

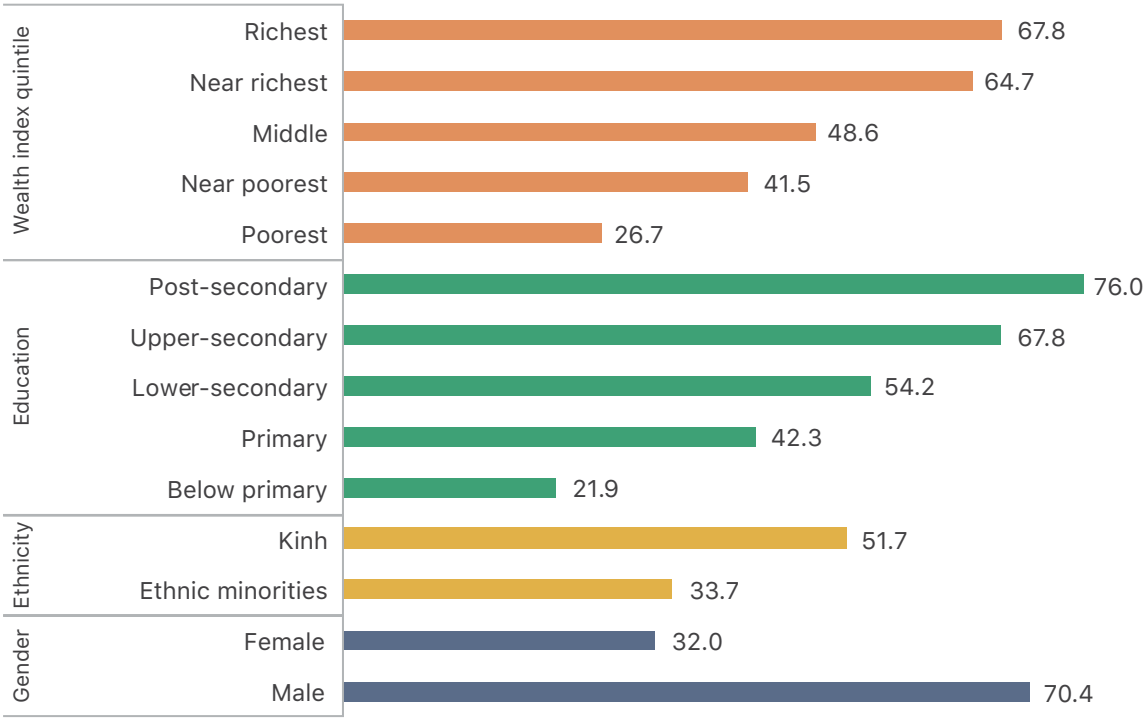
Figure 6.2. Proportion of individuals voting in the recent election by wealth quintile and urban/rural area (%)



Source: Estimations from the PAPI surveys.

The inequality in political participation and activity can be examined by analysing the proportion of people from different groups who can correctly name the current Prime Minister. Figure 6.3 reveals a significant difference between people from different income groups and educational attainment, as well as the considerable inequality between the Kinh and ethnic minorities, or between men and women. It is unsurprising that **individuals from higher income groups and higher education levels are more interested in and exposed to political information** and, therefore, have a higher probability of knowing the current Prime Minister. While 68% of people in the richest group can correctly name the Prime Minister, the percentage in the poorest group is only 27%. The proportion of people in the post-secondary education group is 76% – more than 3 times higher than that in the below-primary education group (22%), which again emphasizes the importance of education for removing inequality in political participation. When comparing ethnic groups, there is a substantial difference between the Kinh and ethnic minorities. Although the voter turnout rates among the Kinh and other ethnic groups are similar, the percentage of ethnic minority individuals who know the current Prime Minister is only 34%, much lower than that of the Kinh with about 52%. In addition, this rate among women is only half that of men.

Figure 6.3. Proportion of people who can correctly name the Prime Minister, 2018 (%)



Source: Estimations from the PAPI surveys.

A similar pattern emerges when examining whether people of different population groups can correctly name the Chairman of the National Assembly and the Secretary of the Communist Party (Table 6.1). Paradoxically, although over 70% of women and ethnic minorities vote for the National Assembly, only approximately 21% of them know the name of the National Assembly's Chairman, which is much lower than other comparative groups, including men (60.4%) and Kinh people (40.3%). The lowest percentage is found in the group with an educational attainment below the primary level, as only 6.8% of them can correctly name the Chairman of the National Assembly.

The percentage of women who can name the Chairman of the National Assembly correctly is only 21.6%, while that of the male group is nearly 3 times higher (over 60%). This rate among ethnic minorities is 20.3%, less than half that of the Kinh. The lowest proportion of people who can correctly name the Chairman of the National Assembly is found among the group with the lowest education level, only 6.8%, nearly one-fifth of the group with primary education, and less than 1/11th the rate of people with an educational attainment in upper high school.

The large disparities between population groups based on different indicators of participation in political activities show that people in disadvantaged groups only participate in elections because of the propaganda calling for participation, without any real interest in and knowledge of political issues, without any concern for the party and state leader, or even for the representative of their voice in the National Assembly parliament.

The rate among rural residents is always lower than that for urban residents by about 11 percentage points. The differences between regions are not significant, but it is noticeable that the Red River Delta, where the capital city of Hanoi is located, has the highest rate of people who know the Prime Minister and the Chairman of the National Assembly.

Table 6.1. Proportion of people knowing the names of the Prime Minister, the Secretary of the Communist Party, and the Chairman of the National Assembly, 2018 (%)

	% correctly naming Prime Minister (%)	% correctly naming Secretary of Communist Party (%)	% correctly naming Chairman of National Assembly (%)
Gender			
Male	70.4	66.6	60.4
Female	32.0	29.1	21.6
Ethnicity			
Ethnic minorities	33.7	35.9	20.3
Kinh	51.7	48.8	42.3
Education			
Less than primary	21.9	13.6	6.8
Primary education	42.3	36.7	28.5
Lower secondary education	54.2	57.2	43.3
Upper secondary education	67.8	63.6	61.7
Post-secondary education	76.0	80.1	77.5
Poverty status			
Non-poor	51.5	49.3	42.0
Poor	27.2	26.5	17.5
Wealth Index quintiles			
Poorest	26.7	26.3	17.2
Near poorest	41.5	40.4	30.3
Middle	48.6	42.4	39.4
Near richest	64.7	58.1	47.4
Richest	67.8	72.3	66.2

	% correctly naming Prime Minister (%)	% correctly naming Secretary of Communist Party (%)	% correctly naming Chairman of National Assembly (%)
Area			
Rural	44.7	41.6	34.3
Urban	55.5	54.2	45.8
Region			
Red River Delta	53.2	59.9	47.8
Midlands and Northern	49.2	59.6	41.8
Northern and Coastal	43.8	43.2	34.9
Central Highlands	49.9	62.1	36.4
Southeast	51.0	48.7	46.6
Mekong Delta	50.1	36.0	35.2
Total	49.7	47.4	40.0

Source: Estimations from the PAPI surveys.

The significant inequality in political participation between population groups is obvious, which shows that people from disadvantaged groups are more likely to be restricted and they might participate in political activities without a real interest in and knowledge of political issues, or without a full awareness of their rights.

The qualitative research in 3 provinces helps explain and consolidate the findings from the quantitative analysis. Indeed, the local residents confirmed that they were more concerned with their personal and family issues, which directly affect their work/agricultural production and their participation in local socio-cultural activities, rather than macro policies. Besides, their understanding of equality in participation, influence, and voice is limited, especially for those living in rural and remote areas.

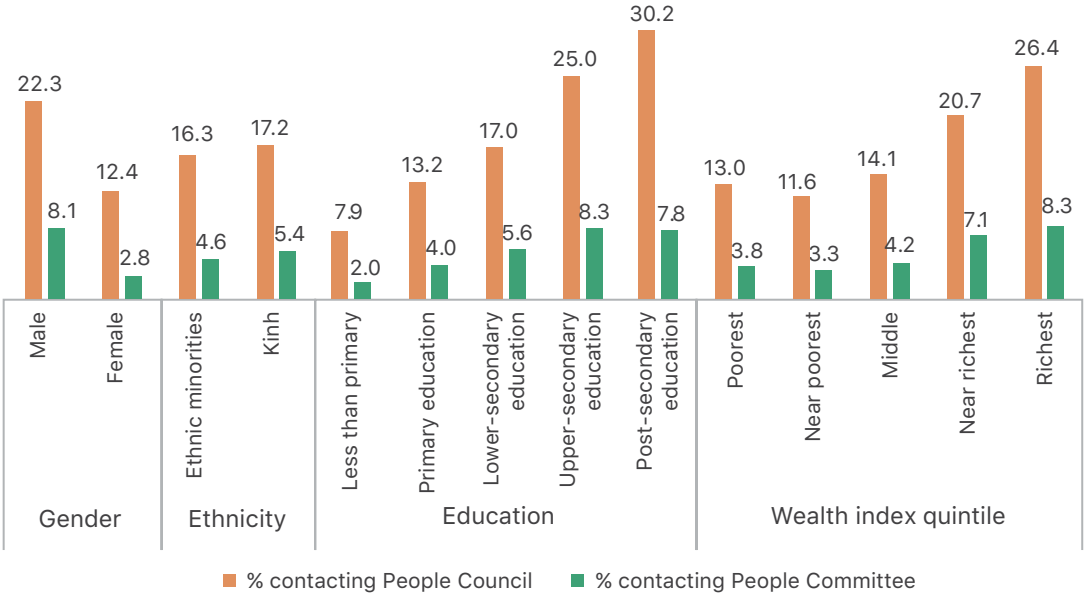
> *"Residents in my commune are basically concerned with economic development. Economic growth is above all other kinds of information, plans and resolutions issued by the Party, People's Council, People's Committee, and mass organisations. It should firstly be connected directly with people's daily lives to get their attention."*
>
> FGD with commune staffs in Quang Hiep Commune, Cu M'gar District, Dak Lak Province

People with a higher income and educational attainment are more likely to have unrestricted access to information, internet access in particular, and actively participate in local political activities. The qualitative survey in Soc Trang Province shows that internet access plays an important role in improving access to information, therefore raising people's awareness of political participation.

> *"The residents know it all (via the internet) so they believe us when we disseminate the information. In some cases, that information is spread in the community, they even know before the officials because the officials often get information from a formal internal source."*
>
> FGD with commune staffs in An Hiep Commune, Chau Thanh District, Soc Trang Province

Percentage who have formally contacted a local representative/national government representative/political party in the last 12 months

Figure 6.4. Proportion of people contacting local government in the last year, 2018 (%)



Source: Estimations from the 2018 PAPI survey.

Figure 6.4 and Table 6.2 present the percentage of people who have formally contacted local representatives (People's Committee and People's Council) in the last 12 months in 2018. The trend is similar to the previous measures where men are more engaged in political activities than women, as the percentage of men contacting local authorities is 2-3 times higher than that of women. It is worth noticing that the difference between ethnic minorities and the Kinh is minimal, as the percentage of Kinh contacting the local People's Committee and People's Council is higher than that of ethnic minorities by about 1 percentage point. The higher the levels of education and income are, the more contact people initiate with their local representatives. The proportion of people who contact the local People's Committee who have completed post-secondary education is over 3 times that of those whose education is below the primary level. Also, the richest group contact the People's Committee/Council twice as much as the poorest. The rate of the poorest group is slightly higher than that of the near-poorest, which might be because the poorest are the main beneficiaries of social protection policies and programmes; therefore, they must maintain contact with the local authorities to receive their benefits.

Table 6.2. Proportion of people contacting local government in the last year (%)

	% contacting village head	% contacting People's Committee	% contacting mass organisation	% contacting People's Council
Gender				
Male	30.2	22.3	14.2	8.1
Female	19.7	12.4	7.9	2.8
Ethnicity				
Ethnic minorities	25.6	16.3	9.8	4.6
Kinh	24.7	17.2	11.1	5.4
Education				
Less than primary	13.6	7.9	4.1	2.0
Primary education	21.4	13.2	7.7	4.0
Lower secondary education	25.0	17.0	11.5	5.6
Upper secondary education	32.9	25.0	17.0	8.3
Post-secondary education	38.1	30.2	18.4	7.8
Poverty status				
Non-poor	24.9	17.3	11.0	5.3
Poor	23.9	15.9	9.6	5.5
Wealth index quintile				
Poorest	18.8	13.0	7.3	3.8
Near poorest	21.1	11.6	7.5	3.3
Middle	22.7	14.1	8.7	4.2
Near richest	28.9	20.7	14.2	7.1
Richest	32.7	26.4	17.1	8.3
Urban/rural				
Rural	23.5	15.1	10.2	5.4
Urban	26.2	19.4	11.7	5.3
Regions				
Red River Delta	19.3	10.6	8.0	3.6
Midlands and Northern	23.4	15.0	9.1	5.6
Northern and Coastal	23.9	15.9	10.5	3.9
Central Highlands	31.1	22.9	14.6	5.3
Southeast	27.1	20.1	12.0	6.0
Mekong Delta	26.8	19.9	12.3	6.7
Total	24.8	17.1	10.9	5.3

Source: Estimations from the 2018 PAPI survey.

Among respondents in the 2018 PAPI survey, the percentage of men and women satisfied with public services are fairly similar, although the proportion of men is somewhat higher than that of women by about 2 percentage points (see Table 6.3). Similarly, the proportions of Kinh and ethnic minorities satisfied with public services are not very different. While the percentage of Kinh satisfied with notarization, land-use right certificates, and other public services is higher than that of ethnic minorities (about 4 to 9.5 percentage points), the rate of Kinh satisfaction with construction licenses is 6 percentage points lower than that of ethnic minorities. The proportion of people who are satisfied with public services in groups with different levels of education and income are relatively high and even. The difference is not too large and does not follow linear rules, as the above criteria.

Table 6.3. Proportion of people satisfied with different public services during the past year, 2018 (%)

	% satisfied with certification service	% satisfied with obtaining construction permit	% satisfied with land-use right certificate	% satisfied with other public services
Gender				
Male	86.28	85.56	73.75	87.98
Female	83.93	79.42	73.72	85.51
Ethnicity				
Ethnic minorities	81.36	88.03	70.22	78.33
Kinh	85.68	81.87	73.98	87.94
Education				
Less than primary	84.4	78.8	85.0	81.8
Primary education	85.1	88.3	78.4	89.9
Lower secondary education	85.0	76.3	73.9	86.0
Upper secondary education	86.5	83.8	72.2	87.8
Post-secondary education	84.1	83.2	63.0	87.6
Poverty status				
Non-poor	85.4	81.9	73.8	87.4
Poor	83.5	95.2	71.4	80.8
Wealth index quintile				
Poorest	82.8	82.1	74.6	81.7
Near poorest	86.9	73.1	84.1	85.4
Middle	85.8	89.8	74.7	90.6
Near richest	84.6	80.8	69.0	86.4
Richest	85.6	82.3	72.0	89.8
Urban/rural				
Rural	85.6	82.3	72.2	85.3
Urban	85.0	82.3	74.9	88.6

	% satisfied with certification service	% satisfied with obtaining construction permit	% satisfied with land-use right certificate	% satisfied with other public services
Regions				
Red River Delta	84.8	75.9	69.2	84.5
Midlands and Northern	79.1	75.8	66.1	81.8
Northern and Coastal	85.5	85.4	71.4	85.9
Central Highlands	75.4	79.7	56.2	79.0
Southeast	85.4	82.8	67.4	90.1
Mekong Delta	90.0	87.7	87.7	89.3
Total	**85.3**	**82.3**	**73.7**	**86.8**

Source: Estimations from the 2018 PAPI survey.

6.2. PERCEIVED INFLUENCE

Percentage who feel they can influence decisions affecting their local area

Social equality is partly reflected by the fact that people, regardless of their gender, ethnic community, education, and economic status, are all aware of their entitlement to political participation, and thereby **actively contribute their opinions to or take part in the local decision-making process**. Therefore, we measure perceived influence by examining the likelihood that people of different population groups participate in meetings organised by the People's Council. Such meetings are considered as the bridge between local residents and leaders. In particular, residents are not only informed about the state's policies and guidelines, but also express their opinions and participate in the decision-making process, especially in important policies and projects that directly affect people's lives, such as social protection policies, projects of public works construction, etc. The **participation of people in meetings with representatives of the masses or local leaders is a prerequisite to help people understand their role and influence, and at the same time motivate them to actively contribute ideas to the formulation of local and national policies.**

Table 6.4 shows that, in general, the percentages of residents surveyed who attend the meetings held by the Commune People's Council and the Provincial People's Council in the last 12 months are relatively low, about 19% and 10%, respectively. **The proportion of men attending the meetings is nearly twice that of women in both cases.** The rates are similar for the Kinh and ethnic minorities. The higher the income and education levels of people are, the more likely they are to attend meetings with the People's Council. Although the difference is insignificant between rural and urban areas, it is notable between regions, as the Southeast regions have the highest rates of residents attending the meetings – 1.5-2 times higher than those of the Red River Delta.

Table 6.4. Proportion of people attending meetings held by the People's Council by demographic and geographic characteristics, 2018 (%)

	% attending meeting held by Commune's People's Council	% attending meeting held by Provincial People's Council
Gender		
Male	23.7	13.4
Female	14.3	7.5
Ethnicity		
Ethnic minorities	17.8	11.4
Kinh	18.9	10.2
Education		
Less than primary	12.7	6.6
Primary education	16.4	8.6
Lower secondary education	20.1	10.7
Upper secondary education	22.8	13.5
Post-secondary education	25.2	14.5
Poverty status		
Non-poor	18.6	10.5
Poor	20.7	8.4
Wealth Index quintile		
Poorest	15.2	7.8
Near poorest	17.1	9.8
Middle	18.7	9.3
Near richest	21.6	12.1
Richest	21.5	12.8
Area		
Rural	17.9	8.9
Urban	19.8	12.0
Region		
Red River Delta	14.9	6.0
Midlands and Northern	17.6	8.2
Northern and Coastal	20.0	9.8
Central Highlands	20.9	11.9
Southeast	21.3	12.8
Mekong Delta	19.1	12.2
Total	**18.8**	**10.3**

Source: Estimations from the 2018 PAPI survey.

The residents in the 3 provinces surveyed confirmed that people in the localities are all equal when it comes to public participation and there is no restriction imposed on disadvantaged groups. In addition, there appears to be a relative consensus that women have an equal opportunity to take part in decision-making within the family compared to their husbands. However, it appears that women and people of ethnic minorities tend to limit themselves in public participation. Women, especially in rural areas, believe they are not as knowledgeable as male family members, such as their husband, son, or brothers, about legal or technical matters.

Indeed, Figure 6.5 displays a huge difference between men and women who submit a proposal to local authorities. The percentage of women who submit proposals to the People's Committee is only half that of men. Although the proportion of Kinh submitting a proposal is higher than that of ethnic minorities by 3 percentage points, in the focus group discussions, the participants from ethnic minorities usually remained silent and not engaged in the discussion as they were hesitant to speak Vietnamese. In some cases, ethnic minority participants felt embarrassed about their pronunciation. The disparities between people of different groups of income level and education attainment follow the same tendency as in the previous measures. Specifically, the percentage of people submitting proposals to all levels of the People's Committee who completed high school or higher is 3.4 times that of people who did not complete primary school. This percentage increases steadily with the education level. Similarly, the richest group submits proposals to all levels of the People's Committee, with a proportion twice that of the lowest income group. Clearly, inequality in participation is caused by economic and education inequalities. Meanwhile, based on local data and surveys, ethnic differences do not account for inequality between the Kinh and ethnic minorities because, in reality, there is no discrimination between the Kinh and other ethnic minorities in their participation in local community activities. However, the underlying cause is the link between the living standards/education levels of ethnic groups and their participation. The limited participation of ethnic minority groups is not because they are ethnic minorities but because their living standards and education levels are not equal to those of the Kinh in general. In addition, the language barrier (reading and speaking Vietnamese) is a major barrier to their participation, making ethnic minorities sometimes refrain from expressing opinions. In the future, the language barrier may be partly solved since the government has been taking positive measures for teaching and learning Vietnamese early (at kindergarten) for ethnic minority students in remote areas.

Box 6.1. The poor and EM groups are less likely to voice their opinions

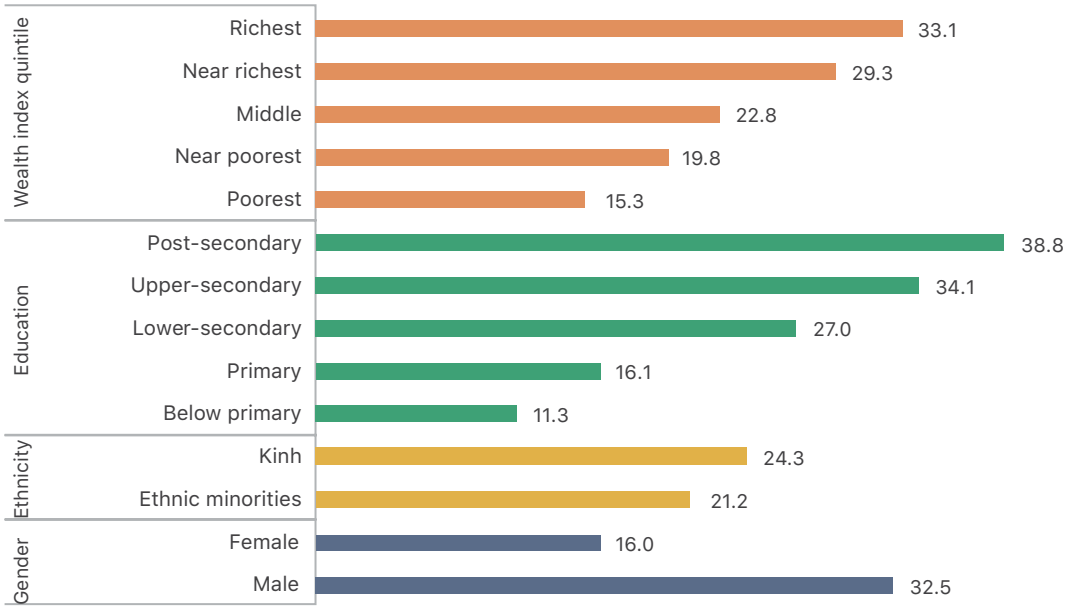
As a poor household in Hung Loi Commune, Yen Son District, Tuyen Quang Province, Mr. Chu's family (a H'Mong household whose previous generation migrated from Ha Giang) comprises 7 members and depends mainly on agricultural activities. Although they did not attend school, he and his wife can understand and communicate fluently in Vietnamese. For regular village meetings, the couple take turns attending, but do not regularly contribute their comments. For community activities such as supervision, socio-economic development plans, or commune budget information, Mr. Chu said that he does not participate and is not aware of the contents. However, his household made a monetary contribution when asked by the commune.

Mrs. Sen's family is a Khmer household listed as near-poor in An Hiep Commune, Chau Thanh District, Soc Trang Province. Having completed her primary education at grade 5, she is currently a babysitter for neighbourhood households. Besides, she participates in the Women's Union at both the village and commune levels, with a monthly allowance of more than 700 thousand VND. Her husband works as a construction worker with a monthly

wage of 200,000 VND. Her family still relies on her son's remittance, who works at an industrial park in Binh Duong Province, about 500,000 VND – 1 million VND per month. Regarding village/commune meetings, Mrs. Sen attends them and provides comments on topics she knows. However, for community activities such as the construction of bridges and roads, she only comes to listen and does not raise her voice. In terms of supervising these works, she does not feel confident to offer her opinions and thinks that men will be better at it.

Mrs. Muon and Mrs. Thong are participated in the female FGD in Hung Loi Commune, Yen Son District, Tuyen Quang Province. Mrs Muon has better living conditions than Mrs. Thong. She also has the confidence to express her opinions in the FGC. When asked *"If you don't understand the design of the construction, how can you raise your voice and participate in the supervision of the construction?"*, Mrs. Muon answered: *"It still must be presented for people to discuss and understand the basic issues in meetings, something like how much money, the financial contributions, the amount of cement and sand needed. If not, the contractors and subcontractors may trim down the materials and people won't know about it. Not at all. I see a lot of construction... with designs that are all wrong, costly and that last only 3-4 years"*. In contrast, when Mrs. Thong was asked for her opinion, she just said: *"I have the same opinion as Mrs. Muon's."*

Figure 6.5. Proportion of people submitting a proposal to the People's Committee during the past year, 2018 (%)



Source: Estimations from the 2018 PAPI survey.

When asked about the supervision of the commune's construction site (a health centre), the male group at the survey site believed that they were not professional enough to participate in the monitoring, and shared the fear of being responsible for public affairs. This is a mentality shared by people in many localities, showing that they are not fully aware of their right to participation. Even if people do not have

enough expertise to participate in assessing public works, they still have the right to ask questions and to receive satisfactory explanations from local organisations and authorities. **People's participation may be limited due to local authorities not fostering an environment that encourages residents to raise their voices.**

> *"People supervise but they cannot stand to be responsible. No one dares. For example, if the work is good, it would not be a problem, but if it isn't good, how can people dare to endure it? Too hard."*
>
> KII with a male resident in Hung Loi Commune, Yen Son District, Tuyen Quang Province

Besides, people tend to participate in movement-based community activities. Contribution and participation in important local decisions greatly depend on emulation movements and especially the transparency and advocacy of local government representatives in villages. Different village heads had different practises in the way they encouraged people to participate in discussions and contribute ideas, as well as in the mechanism of opinion and complaint receiving and responding.

> *"This village was able to do so thanks to the village chief. She is very clear so people believe whatever she mobilizes. Clearly, publicly... Previously, there were 2 village chiefs, but they didn't do well. It was not clear and public, so that people did not believe them."*
>
> KII with a female resident in Quang Hiep Commune, Cu M'gar District, Dak Lak Province

> *"They just inform the head of the village, just a little bit, but not the residents. There is not much information on the notification boards. People do not know the actual financial situations. They built the construction, then they told us the construction was completed, then they left. That's why many constructions were broken."*
>
> *"Residents contributed their ideas, raised their concern many times, but no one replied."*
>
> FGD with female residents in Hung Loi Commune, Yen Son District, Tuyen Quang Province

In some localities, the observance of people is influenced by religious factors. One of the localities surveyed has integrated the propaganda and implementation of state policies into religious activities in order to improve the implementation efficiency and the people's participation (Box 6.2).

Box 6.2. Integrating propaganda and the implementation of state policies into religious activities in Soc Trang

> Understanding the importance of religious activities for local people, especially the Khmer, the leaders of the People's Committee of An Hiep Commune, Chau Thanh District, Soc Trang Province, combined propaganda and advocacy for people to implement state policies and participate in the commune's common activities at the pagoda. On full moon days and the 30th day of the lunar month every month when people go to pagodas, the local authorities ask the Management Boards of pagodas in the commune to coordinate the effective information transmission to the people and propagandise the commune's activities and plans, so that people actively respond and participate more enthusiastically in community activities. In particular, defense drills affect the areas where rice and other crops are located, but are still strictly obeyed by the people.

To sum up, political participation is determined by the people's level of educational attainment and, to a smaller extent, by their income. Gender is also a clear determinant causing inequality in participation. In other words, inequality in participation, influence, and voice goes hand in hand with income inequality, education inequality, and gender inequality in society. Inequality in participation can potentially perpetuate the cycle of inequality since disadvantaged groups do not have enough opportunities to participate in the important decision-making process in their locality, leading to intergenerational inequality that could otherwise be avoided.

Thus, according to 2018 PAPI Survey data, the deepest difference is between groups with different levels of education. Differences in educational attainment not only directly create a gap in career opportunities and lead to disparities in living standards, but they also impact the opportunity to participate in important local decisions that directly affect people's lives. When the voices and participation of disadvantaged groups (due to low levels of education and income) are limited, policies cannot fully reflect their actual needs. Therefore, it will be difficult to solve these problems in the near future and they may even remain for generations, creating intergenerational inequality.

The data comparing people's perceptions of the local security situation between 2013 and 2018 (Table 6.5) reflects the significant differences between rich and poor, between higher-educated and lower-educated people, which means that the needs for security are not adequately and fairly met for disadvantaged groups. The proportion of people in subgroups who feel safe living locally generally increases from 2013 to 2018. However, the proportion of people in households with victims of theft, intrusion, and violence tends to increase in the poor group (more than 2 percentage points). Meanwhile, the proportion decreases significantly among the non-poor group (by 3 percentage points) and the richest group (by 7 percentage points). The change between 2013 and 2018 happens faster and more positively for the group of people with higher education. Thus, the disadvantaged groups are gradually becoming the main victims of insecurity and social disorder.

Table 6.5. Security, 2013-2018 (%)

Group	Proportion of people feeling safe in their locality during the past 3 years (%)		Proportion of people living in a household in which a member has been the victim of theft, robbery, break-in, and physical violence during the past 12 months	
	PAPI 2013	PAPI 2018	PAPI 2013	PAPI 2018
Gender				
Male	74.6	85.5	12.4	9.8
Female	78.9	85.8	12.9	10.6
Ethnicity				
Ethnic minorities	83.5	86.6	10.2	9.4
Kinh	75.8	85.5	13.0	10.3
Education				
Less than primary	82.1	86.8	9.5	8.8
Primary education	78.4	86.5	12.6	10.6
Lower secondary education	72.7	83.5	12.7	10.1
Upper secondary education	73.9	85.8	17.4	10.9
Post-secondary education	71.4	88.0	16.3	11.1

Group	Proportion of people feeling safe in their locality during the past 3 years (%)		Proportion of people living in a household in which a member has been the victim of theft, robbery, break-in, and physical violence during the past 12 months	
	PAPI 2013	PAPI 2018	PAPI 2013	PAPI 2018
Poverty status				
Non-poor	76.1	85.4	13.1	10.1
Poor	82.1	88.1	9.8	12.2
Wealth Index quintile				
Poorest	79.9	85.1	**7.8**	**9.9**
Near poorest	77.4	87.3	12.4	9.5
Middle	77.2	84.8	11.9	10.2
Near richest	77.4	86.0	13.7	10.9
Richest	72.1	84.9	**17.6**	**10.7**
Area				
Rural	76.6	85.6	11.8	10.6
Urban	77.8	85.7	15.2	9.8
Region				
Red River Delta	76.3	84.3	11.7	7.7
Midlands and Northern	74.7	85.6	11.6	6.4
Northern and Coastal	78.0	87.8	11.3	10.9
Central Highlands	75.2	85.3	18.5	15.0
Southeast	76.6	81.8	15.5	12.1
Mekong Delta	77.7	87.4	11.3	10.6
Total	**76.9**	**85.6**	**12.6**	**10.2**

Source: Estimations from the 2018 PAPI survey.

6.3. ANALYSIS OF THE DRIVERS OF INEQUALITIES IN PARTICIPATION

Throughout the statistics of political participation and perceived influence, the most disadvantaged individuals are always people from the poorest population groups, people with the lowest levels of education and, to a smaller extent, women. Although there are some disparities between the Kinh and ethnic minority people, the qualitative research results suggest that the disparities are not caused by the nature of their ethnicity, but rather by the difference between their education and wealth levels. With regards to decision-making at the micro-level, the qualitative research shows that men and women equally participate in the process within families. However, women seem to refrain from raising their voices outside their families.

Based on the data and analysis presented above, as well as on supporting data from other sources, we have identified four main drivers causing inequalities in political participation, influence, and voice.

Income inequality and education inequality are the root causes of inequality in participation

Disparities in education and living standards lead to inequality in the social and political participation of individuals. People with higher education and higher living standards oftentimes have better conditions and means to update their information from mainstream sources. They also have more advantages in using electronic administrative services, such as authentication, certification, construction permits, etc. through the government's web portal. Not only do they save time, but there can also be an "underhand" cost. These are "privileges" that are difficult to access for the disadvantaged groups (the poor, the less educated).

The large disparities between population groups through the different indicators of participation in political activities presented above show that people from lower levels of education groups and poorer groups participate in elections only because of the movement, propaganda, and calling for participation without any real interest in political issues. The significant inequality in political participation between the higher and lower education attainment groups, between the richest and poorest groups is evident, which shows that people of disadvantaged groups are less likely to engage and be interested into political affairs. They might participate in political activities, but they vote without a full knowledge of political issues or of their rights.

The prevalence of social and cultural norms that hamper women's empowerment

From the 2018 PAPI Survey, about 70% of people think that it does not matter whether men or women are leaders in the public sector, while the rest expected men to be leaders and managers (it is the women in this group who do not choose women to hold positions of state officials). However, data from the 2019 Social Institutions & Gender Index (SIGI) Value for Vietnam (OECD Development Centre, 2019) indicates that 56% of the population believes men are better political leaders than women. Indeed, this is confirmed by the percentage of male MPs at 73%, while the share of male managers is also 73% and that of male agricultural land holders is higher, at 91%. The analysis from the MDRI qualitative research presented above also shows that a majority of women tend to refrain from participating in community activities, especially those that require technical or legal knowledge, although women and men are equal when it comes to making decisions within their families. Such a social norm is ingrained in many generations of Vietnamese people, especially in rural areas.

Ineffectiveness in encouraging the democratic participation of all population groups

Data from PAPI surveys indicate that the proportion of the poor and people with primary/lower education participating in elections is much lower than that of the rich and people who completed high school. It may be a sign that the mobilisation of local authorities has not been effective and encouraged the full participation of all social sectors yet. A mechanism has not been established to disseminate information widely and facilitate the election for temporary residents, such as workers coming from other provinces or people in remote areas going to milpas frequently.

In addition, the voice of local people is not received by local officials in a timely manner due to the lack of thorough receiving and responding mechanisms. The complaints and inquiries of residents during village and commune meetings may be recorded but not responded to or resolved. This is partly due to a lack of human resources fully equipped with skills and expertise to work for local authority offices, and village/commune officials have to hold many positions.

There is also ineffectiveness in the implementation of women's empowerment at the local level, especially at the village level. Although women have equal opportunity to take part in decision-making within the family compared to their husbands, they are less likely to raise their voice outside their families. According to the PAPI 2019 Report (Chapter 2), female leaders have an important influence on the mobilisation of women's participation, creating more opportunities for women. The qualitative research also shows that, compared to their male colleagues, female village chiefs are better at mobilising people to participate in political and economic activities. However, the PAPI 2019 Report indicates that there is a significant difference in women leadership at the village level in comparison with higher levels such as the National Assembly (12% vs 27%). The report then concludes that the bias against women holding political leadership positions is greater at the local level.

Inefficiency in implementation of laws that ensure transparency and prevent corruption

Vietnam promulgated the Anti-Corruption Law 2018 and Decree 59/2019/ND-CP detailing a number of articles and measures to implement the anti-corruption law from 2019. This shows that the determination of the government against corruption contributes to equality of opportunity and the participation of citizens. However, anti-corruption activities have not achieved the expected results. The PAPI Survey Results (2011-2018) could be taken as an illustration with over 60% of respondents saying that the "familiarity" factor plays an important role in government entrance exams, over 30% of respondents having to spend extra money to be taken care of when going to a doctor or to receive a land-use right certificate (CECODES, VFF-CRT, RTA & UNDP, 2019). The inefficiencies in the fight against corruption over the years have diminished public trust in government agencies, resulting in limited voice and participation of people in the policy-making process, especially for vulnerable groups.

Another source of data which confirms the inefficiency of Vietnam in corruption-fighting is Transparency International. Vietnam ranks 96th out of 180 countries, with a score of only 37 out of 100 points in the Corruption Perception Index 2019 ("Transparency International – Vietnam", 2019). The score ranks the perceived level of public sector corruption on a scale of 0 (highly corrupt) to 100 (very clean).

The qualitative survey in this study shows that local governments do not receive specific guidance on the implementation of budget transparency. For example, the information channel from the commune to people is mainly a bulletin board at the CPC, a loudspeaker, or the village head. The establishment of monitoring teams for local community projects and activities is often spontaneous and depends largely on village/commune leaders. Information dissemination depends heavily on the human factor, leading to informal sources of information and creating barriers for people to receive information, especially concerning legal matters. Although the widespread development of the media and the internet has contributed to improving people's oversight, this has unintendedly limited the participation of vulnerable groups when they cannot afford to use modern communication devices or when the internet connection is limited.

CHAPTER

7

7

CONCLUSION AND RECOMMENDATIONS

To reduce poverty and inequality, it is necessary to take a human-centred approach that focuses not only on growth, but also on the different aforementioned dimensions of well-being

7.1. CONCLUSIONS

Vietnam has been very successful at economic growth and poverty reduction over the last 30 years. However, **the benefit from economic growth has not been evenly shared among all subpopulation groups,** leaving behind ethnic minority groups, certain geographical regions, women, and the poorest households. While **inequality between provinces accounts for 22% of total inequality, inequality between ethnic groups is at 15%**. As an illustration, whereas the Kinh and Hoa have the lowest poverty rate, small ethnic minority groups still have persistently high poverty rates.

The research findings point at **large gaps between subpopulation groups across spatial, socio-economic, and ethnic axes of inequalities** in their capability to enjoy the right to a proper, quality education and to experience a life free of illness and access to quality healthcare facilities. People belonging to ethnic minorities, women, and people living in rural provinces are more affected by inequalities in health and education than the Kinh, men, and higher-income households living in predominantly urban areas.

The unequal access to high quality healthcare services has very tangible, human costs for the most vulnerable and poorest groups of the population. As an illustration, an inhabitant of the Central Highlands lives, on average, 5.9 fewer years than one from the Southeast region. Similarly, the ability to invest in health spending is unevenly distributed amongst ethnic groups. The annual out-of-pocket spending on health by someone from the Kinh group can be up to 15 times that of someone from the H'Mong group. The average number of visits per year by ethnic minorities and the poorest socio-economic groups, especially at provincial and central hospitals, is still very low when compared to the Kinh and the richest households.

Vietnam has achieved universal access to education at the primary and lower education levels. **Yet the experience of education remains highly uneven**: the quality of education at primary school, as well as the access to education at higher levels, is still highly differentiated between ethnic groups, as well as households with different living standards. Someone born in an urban region will have almost 3 more years of schooling than a student from a rural area (Table 5.4). Similarly, an individual **from the richest 20% of the population will attend school almost +6 years than someone from the poorest 20%** (Table 5.5.). Beyond access, when they get to primary school, ethnic minority children and children in the Northern Uplands display significantly weaker academic achievements than Kinh children, children in the lowland areas, and children from richer households. University enrolment rates are also much lower in rural and mountainous areas, and in low-income households. Investment in education, as reflected by household expenditure on education, also varies significantly between population subgroups. Expenditure on education for one student from a Kinh household is about 4 times that for an ethnic minority student.

The main factors that explain these observed gaps are unequal access to quality, essential public services including health, education, water, and infrastructure. For instance, the lack of access to clean water and improved toilets remains a major challenge affecting the health status in households in Vietnam, especially in rural areas, areas with rough terrain, and those with ethnic minorities. In the field of education, the unequal quality of existing infrastructure, namely between the main school site and satellite school sites in rural provinces, explains wide gaps in the quality of facilities, equipment, teaching, and learning activities. Moreover, these inequalities **reinforce inequalities in other life domains, creating further barriers for certain subpopulation groups to enjoy equal opportunities to access the labour market and to have quality, dignified work**.

In addition, the **inequality in the capability to participate, raise one's voice, and have influence on public matters** is extremely acute between men and women and among the poorest households, with weaker levels of education, when compared to the richest, urban, highly educated households. Compared to men, women have lower levels of political interest and lower voting turnout levels. The percentage of individuals who participate in elections is directly proportional to the level of education. The higher the education level is, the greater the proportion of people participating in elections. High-income households and urban households also have a higher level of political knowledge and voting turnout in elections than low-income and rural households.

Furthermore, the proportion of men attending meetings with public representatives and/or local leaders is almost twice that for women. While the poorest are more involved in meetings with commune People's Councils, the groups with higher economic statuses tend to be more involved in provincial meetings. The more educated and the higher income earners tend to engage actively in dialogues with the People's Council. The percentage of women proactively voicing their opinions and sending recommendations to People's Committees at all levels is only half that of men. The general trend is that the more educated people are and the higher their income, the greater their ability to actively participate and voice their personal opinions.

Here, we find a key sign of compounding inequalities that generate a potential spiral, reproducing the dynamics of disadvantage and exclusion along gender, socio-economic, ethnic, and spatial axes of inequality. Since the educational level, and the time and material resources are very much related to the capability to influence public affairs, those belonging to an ethnic minority as well as the poorest, rural households with less access to quality education will be the least equipped with the critical abilities to voice their needs and demands, and shift the terms of the public debate in their favour. Along these axes of inequalities, 50% of the population is structurally left behind on political matters, as unequal gender relations reinforce inequalities in the realm of public participation.

7.2. RECOMMENDATIONS

Based on the analysis, the study proposes a number of relevant policy recommendations to bridge the gap between population groups. **To reduce poverty and inequality, it is necessary to take a human-centred approach that focuses not only on growth, but also on the different aforementioned dimensions of well-being**. The government should implement appropriate policies to promote the private sector to attract the labour force from rural areas and from ethnic minorities, and at the same time, policies to increase agricultural productivity, as well as to find markets for the output. Besides, **income redistribution policies and pro-poor policies are also of great importance**. To reduce inequality, the poorest groups should not only increase their income levels, but also achieve a higher income growth rate than the richest, while attaining similar levels of well-being. Eliminating poverty and hunger are the most important SDGs that the government of Vietnam has long been aiming to achieve, under the commitment to SDG 10.

Poor people and ethnic minorities tend to work in agriculture and the informal sector with low-paid jobs. To increase the income of the poor, it is important to increase non-farm employment opportunities for them, as well as to improve agricultural productivity and ensure living wages and dignified working conditions. The government should have more appropriate **policies to promote the private sector and attract the labour force from rural areas and from ethnic minorities.** Small and medium enterprises play an important role in job creation and poverty reduction in Vietnam. There are several policies

supporting firms in remote areas and attracting workers from vulnerable groups, such as people with disabilities, ethnic minorities, and women. Therefore, policies that support an increase in agricultural productivity, such as extension services and links to markets, the improvement of the infrastructure in remote areas, and micro-credit schemes are still important and valid for the coming years.

Income redistribution policies and pro-poor policies should be implemented to reduce poverty, thereby reducing inequality. The government should also have policies to promote equal access and quality healthcare and education in disadvantaged areas, in particular areas mostly populated by ethnic minorities. Improving child health requires a long-term, wide range of policies from **early childhood programmes to the education of parents and children and support for nutrition and healthcare**. Not only nutrition but also knowledge about childcare is important. Even though the provision of health insurance to the poor and ethnic minorities has been considered quite successful, these groups' access to healthcare services is limited and the healthcare quality is poor. Therefore, the government should have policies to attract qualified healthcare workers to remote and disadvantage areas.

In addition to economic development policies, the government should also implement policies to promote **healthcare and education in disadvantaged areas**, in particular areas mostly populated by ethnic minorities. There should be policies to cover the travel expenses of caregivers who accompany patients to visit provincial or central hospitals. Improving the access to safe drinking water greatly contributes to improving people's health. The **quality of teaching and education in disadvantaged areas** should also be given priority and receive adequate investment. Vocational training to meet the labour market demand also improves professional skills and job opportunities for disadvantaged groups.

Policies which aim at raising awareness, as well as at training men and women from the poorest households and ethnic minorities about the importance of healthcare and child care should be implemented. The awareness of the importance of early childcare among ethnic minority parents or primary caregivers, as well as of their own roles in early childhood development remains limited. The cultural practices and perceptions of certain ethnic minority groups have a negative impact on their health status. Child marriage is still practised by a number of ethnic groups, thereby forcing girls to drop out of school and affecting their reproductive health rights.

Improving access to safe drinking water in schools and homes greatly contributes to improving people's health. In addition to the provision of infrastructure for sanitation and safe water, the awareness of how to maintain it properly should be taken into consideration. People lack the adequate knowledge to use and maintain the waterworks, which causes them to no longer function. As a result, the population lacks access to safe drinking water and has to find alternative sources, which are not necessarily safe. Therefore, local communities and authorities need to have operations and maintenance plans in place, supported by mechanisms to ensure community involvement, in order to sustain operation and maintenance activities more effectively and efficiently. To support this, official guidelines or manuals about operation and maintenance should be issued to encourage the self-managing operation and maintenance of these waterworks.

The **quality of teaching and education** in disadvantaged areas should also be given priority and receive adequate investment. The dropout rate at high school is much higher for ethnic minorities. The distance from home to school is one of the barriers for ethnic minority students. Lunch programmes and scholarships for poor and ethnic minority students are important. Providing food during school can improve health, as well as encourage regular school attendance. Communicating information to parents

about the value of education will be crucial to increase and maintain school enrolment. Vocational training to meet the labour market demand also improves professional skills and job opportunities for disadvantaged groups.

Critical thinking, active-citizenship education and awareness-raising programmes will be critical to support and strengthen the abilities of women, the poorest households, and less educated people to be equipped with key critical tools and to become fully aware of the potential of public participation and voice raising. These programmes should encourage an active participation in the local democratic process, as well as other social activities at the local and community level. The contribution to and participation in important local decisions hugely rely on 'learning by doing,' but also on emulation movements and role modelling, especially through the transparency and advocacy practices of local government representatives in villages. In this sense, there should be programmes in accordance with local democratic regulations promoting good practices and spaces for structured participation, idea contributions, mechanisms of opinion, and complaint receiving and responding.

To effectively address growing multiple inequalities, it is necessary to understand them, to better measure them, to better comprehend their causes and determinants, to find the best action levers to counter them in all areas, and to support the development and implementation of effective strategies and actions in the field. That is why it is **essential to improve data, analysis, and knowledge, in particular by collecting disaggregated data**. This research project encountered critical limitations to access up-to-date, quality data for several of the indicators suggested by the MIF methodology, which very much conditioned our initial selection of domains and subdomains. Furthermore, the MIF methodology embraces other domains for which data does not exist or has not been frequently collected. For future studies and research that aim to understand inequalities from a multidimensional perspective, it will be essential to access a comprehensive list of indicators used by national stakeholders to frequently monitor and assess multidimensional inequalities. The MIF indicators, which rely on a capability and human-right based approach, could be included in the list of National Statistical Indicators and collected in the National Survey Programme.

REFERENCES

In English

A class apart. (2019). Retrieved 10 April 2020, from https://www.economist.com/leaders/2019/04/13/a-class-apart

Acuña-Alfaro, J., Do, G., and Do, H. (2010). Measuring governance and public administration for human development: A demand-side approach. Background Paper for 2010 National Human Development Report – UNDP – VASS.

Alesina, A., & Rodrik, D. (1994). Distributive Politics and Economic Growth. ***The Quarterly Journal Of Economics***, 109(2), 465-490. doi: 10.2307/2118470

Badiani, Reena; Baulch, Bob; Brandt, Loren; Dat, Vu Hoang; Giang, Nguyen Tam; Gibson, John; Giles, John; Hinsdale, Ian; Hung, Pham; Kozel, Valerie; Lanjouw, Peter; Marra, Marleen; Ngoc, Vu Van; Phuong, Nguyen Thi; Schuler, Paul; Thang, Nguyen; Thanh, Hoang Xuan; Trung, Le Dang; Tung, PhungDuc; Viet Cuong, Nguyen; Vu, Linh Hoang; Wells-Dang, Andrew. (2013). ***2012 Vietnam poverty assessment: well begun, not yet done - Vietnam's remarkable progress on poverty reduction and the emerging challenges*** (English). Washington DC; World Bank.

Benjamin, D., Brandt, L., & McCaig, B. (2017). Growth with equity: income inequality in Vietnam, 2002–14. ***The Journal Of Economic Inequality***, 15(1), 25-46. doi: 10.1007/s10888-016-9341-7

Bourguignon, Alain Jean-Francois. (2003). ***The growth elasticity of poverty reduction: explaining heterogeneity across countries and time periods (English)***. Washington, DC: World Bank. http://documents.worldbank.org/curated/en/503161468780002293/The-growth-elasticity-of-poverty-reduction-explaining-heterogeneity-across-countries-and-time-periods

Bui, A., Nguyen, C., & Pham, T. (2016). Poverty among ethnic minorities: the transition process, inequality and economic growth. ***Applied Economic***s, 49(31), 3114-3128. doi: 10.1080/00036846.2016.1254341

Cao & Akita. (2008). Urban and Rural Dimensions of Income Inequality in Vietnam, No EMS_2008_04, Working Papers, Research Institute, International University of Japan.

CECODES, VFF-CRT, RTA & UNDP. (2019). ***Governance and Public Administration Performance Index in Vietnam (PAPI) 2018: Measurement from practical experience of the people***. General policy research report of Centre for Development Research and Community Support (CECODES), Centre for Scientific Research and Training of Vietnam Fatherland Front (VFF-CRT), Real Time Analysis Company and United Nations Development Program (UNDP). Hanoi, Vietnam.

CECODES, VFF-CRT & UNDP. (2014). ***The Vietnam Governance and Public Administration Performance Index (PAPI) 2013: Measuring Citizens' Experiences***. A Joint Policy Research Paper by Centre for Community Support and Development Studies (CECODES), Centre for Research and Training of the Vietnam Fatherland Front (VFF-CRT), and United Nations Development Programme (UNDP). Ha Noi, Vietnam.

Chuong, N. C., Van Minh, H., Thi Thuy Duong, D., Duc, D. M., Anh Dao, L. T., &Duy Anh, N. (2018). ***Progress on maternal health care in Vietnam: Findings from Vietnam Multiple Indicator Cluster Survey 2000, 2006, 2011, and 2014***. Health Care for Women International, 39(4), 368–376. doi:10.1080/07399332.2017.1405960

Claus, I., Martinez-Vazquez, J., & Vulovic, V. (2012). Government Fiscal Policies and Redistribution in Asian Countries. ***SSRN Electronic Journal***. doi: 10.2139/ssrn.2186172

Cramer, C. (2003). Does inequality cause conflict?. ***Journal Of International Development***, 15(4), 397-412. doi: 10.1002/jid.992

Dang, H., & Glewwe, P. (2017). Well Begun, but Aiming Higher: A Review of Vietnam's Education Trends in the past 20 Years and Emerging Challenges. ***The Journal Of Development Studies***, 54(7), 1171-1195. doi: 10.1080/00220388.2017.1380797

Deaton, Angus S. (1997). ***The Analysis of Household Surveys: A Microeconometric Approach to Development Policy (English)***. Washington, D.C.: The World Bank. http://documents.worldbank.org/curated/en/593871468777303124/The-Analysis-of-Household-Surveys-A-Microeconometric-Approach-to-Development-Policy

Deininger, K., & Squire, L. (1998). New ways of looking at old issues: inequality and growth. ***Journal Of Development Economics***, 57(2), 259-287. doi: 10.1016/s0304-3878(98)00099-6

Dolan, P., Peasgood, T., & White, M. (2008). Do we really know what makes us happy? A review of the economic literature on the factors associated with subjective well-being. ***Journal Of Economic Psychology***, 29(1), 94-122. doi: 10.1016/j.joep.2007.09.001

Donaldson, J. F. (2008). Unequal Chances to Participate in Adult Learning: International Perspectives, by Richard Desjardins, Kjell Rubenson, and Marcella Milana. Paris: UNESCO Institute for Educational Planning, 2006. 128 pp. ***Adult Education Quarterly***, 58(2), 176–177. https://doi.org/10.1177/0741713607309801

Elbers, Chris; Lanjouw, Jean O.; Lanjouw, Peter. (2002). ***Micro-level estimation of welfare (English)***. Policy, Research working paper no. WPS 2911. Washington, DC: World Bank. http://documents.worldbank.org/curated/en/362131468739473297/Micro-level-estimation-of-welfare

Elbers, C., Lanjouw, J., & Lanjouw, P. (2003). Micro-Level Estimation of Poverty and Inequality. ***Econometrica***, 71(1), 355-364. doi: 10.1111/1468-0262.00399

Ferrer-i-Carbonell, A., & Frijters, P. (2004). How Important is Methodology for the Estimates of the Determinants of Happiness?. ***The Economic Journal***, 114(497), 641-659. doi: 10.1111/j.1468-0297.2004.00235.x

Giang, L., Nguyen, C., & Tran, T. (2016). Firm agglomeration and local poverty reduction: evidence from an economy in transition. ***Asian-Pacific Economic Literature***, 30(1), 80-98. doi: 10.1111/apel.12131

Hanh, T. T. D., Tuan, D. K., Anh, N. D., Ha, B. T. T., &Anh, L. T. K. (2018). ***Premarital sex, contraceptive use among unmarried women migrant workers in industrial parks in Vietnam, 2015***. Health Care for Women International, 39(4), 377–388. doi:10.1080/07399332.2017.1412439

Hanushek, E., & Woessmann, L. (2008). The Role of Cognitive Skills in Economic Development. ***Journal Of Economic Literature***, 46(3), 607-668. doi: 10.1257/jel.46.3.607

International Religious Freedom Report for 2017 – Vietnam | U.S. Embassy & Consulate in Vietnam. (2018). Retrieved 10 April 2020, from https://vn.usembassy.gov/international-religious-freedom-report-2017-vietnam/

Knight Frank Research. (2019). The Wealth Report: The Global perspective on prime property and investment (p. 86). Knight Frank. Retrieved from https://content.knightfrank.com/resources/knightfrank.com/wealthreport/2019/the-wealth-report-2019.pdf

Kuznets, S. (1955). Economic Growth and Income Inequality. ***The American Economic Review***, 45(1), 1-28. Retrieved April 13, 2020, from www.jstor.org/stable/1811581

Lanjouw, P., Marra, M., & Nguyen, C. (2016). Vietnam's Evolving Poverty Index Map: Patterns and Implications for Policy. ***Social Indicators Research***, 133(1), 93-118. doi: 10.1007/s11205-016-1355-9

Le, Chau & Nguyen, Cuong & Phung, Thu & Phung, Tung. (2014). Poverty Assessment of Ethnic Minorities in Vietnam. MPRA Paper 70090, University Library of Munich, Germany.

Lee, H.-H., Lee, M., & Park, D. (2014). ***Growth policy/strategy and inequality in developing Asia.Inequality in Asia and the Pacific***. Asian Development Bank and Routledge.

Leowski J. (1986). ***Mortality from Acute Respiratory Infections in Children under 5 Years of Age: Global Estimates***. World Health Statistics Quarterly; 39:138–44.

Lerman, R., & Yitzhaki, S. (1985). Income Inequality Effects by Income Source: A New Approach and Applications to the United States. ***The Review Of Economics And Statistics***, 67(1), 151. doi: 10.2307/1928447

López-Feldman, A. (2006). Decomposing Inequality and Obtaining Marginal Effects. The Stata Journal: ***Promoting Communications On Statistics And Stata***, 6(1), 106-111. doi: 10.1177/1536867x0600600107

LSE & Oxfam. (2018). ***Multidimensional Inequality Framework*** [Ebook]. Retrieved from http://sticerd.lse.ac.uk/inequality/the-framework/media/mif-framework.pdf

MDRI. (2016). Report of the Vietnam - Global Partnership for Education - Vietnam Escuela Nueva (GPE-VNEN) Project, Mekong Development Research Institute, Hanoi, Vietnam.

MDRI. (2018). 54 ethnic groups: Why the difference?

Nguyen, C., & Pham, N. (2018). Economic growth, inequality, and poverty in Vietnam. ***Asian-Pacific Economic Literature***, 32(1), 45-58. doi: 10.1111/apel.12219

Nguyen, C., & Nguyen, L. (2017). Intra-generational and intergenerational mobility in Vietnam. MPRA Paper 80083, University Library of Munich, Germany.

Nguyen, C., Phung, T., & Westbrook, D. (2015). Do the poorest ethnic minorities benefit from a large-scale poverty reduction program? Evidence from Vietnam. ***The Quarterly Review Of Economics And Finance***, 56, 3-14. doi: 10.1016/j.qref.2014.09.010

Nguyen, C., Tran, T., & Van Vu, H. (2016). Ethnic Minorities in Northern Mountains of Vietnam: Employment, Poverty and Income. ***Social Indicators Research***, 134(1), 93-115. doi: 10.1007/s11205-016-1413-3

Nguyen, H., Doan, T., & Tran, T. (2018). The effect of various income sources on income inequality: a comparison across ethnic groups in Vietnam. ***Environment, Development And Sustainability,*** 22(2), 813-834. doi: 10.1007/s10668-018-0221-0

Nguyen, H., Kompas, T., Breusch, T., & Ward, M. (2017). Language, Mixed Communes, and Infrastructure: Sources of Inequality and Ethnic Minorities in Vietnam. ***World Development, 96***, 145-162. doi: 10.1016/j.worlddev.2017.03.004

Nguyen Viet, C., Tran Ngoc, T., & van der Weide, R. (2010). Poverty and Inequality Maps in Rural Vietnam: An Application of Small Area Estimation. ***Asian Economic Journal,*** 24(4), 355-390. doi: 10.1111/j.1467-8381.2010.02043.x

Nutrition. Retrieved 10 April 2020, from https://www.unicef.org/vietnam/nutrition

OECD Development Centre. (2019). ***Social Institutions & Gender Index - Country Profiles - Viet Nam*** [Ebook]. Retrieved from https://www.genderindex.org/wp-content/uploads/files/datasheets/2019/VN.pdf

Oxfam (2017). Even it up: ***How to tackle inequality in Vietnam***. Retrieved from https://www-cdn.oxfam.org/s3fs-public/file_attachments/bp-vietnam-inequality-120117-en.pdf

Østby, G. (2013). Inequality and political violence: ***A review of the literature. International Area Studies Review***, 16(2), 206-231. doi: 10.1177/2233865913490937

Persson, T., & Tabellini, G. (1994). Is Inequality Harmful for Growth? ***The American Economic Review***, 84(3), 600-621. Retrieved April 13, 2020, from www.jstor.org/stable/2118070

Pimhidzai, Obert. (2018). ***Climbing the ladder: poverty reduction and shared prosperity in Vietnam (English)***. Washington, D.C. : World Bank Group.

Rheinländer, T., Samuelsen, H., Dalsgaard, A., & Konradsen, F. (2010). Hygiene and sanitation among ethnic minorities in Northern Vietnam: Does government promotion match community priorities?. ***Social Science & Medicine***, 71(5), 994-1001. doi: 10.1016/j.socscimed.2010.06.014

Schneider, S. (2015). Income Inequality and Subjective Well-being: Trends, Challenges, and Research Directions. ***Journal Of Happiness Studies***, 17(4), 1719-1739. doi: 10.1007/s10902-015-9655-3

Schultz, T. (1997). Assessing the productive benefits of nutrition and health: An integrated human capital approach. ***Journal Of Econometrics***, 77(1), 141-158. doi: 10.1016/s0304-4076(96)01810-6

Schultz, T. (2002). Wage Gains Associated with Height as a Form of Health Human Capital. ***American Economic Review***, 92(2), 349-353. doi: 10.1257/000282802320191598

Sen, A. K. (1993). Capability and Well-being, in Nussbaum, M. and Sen, A (ed) The Quality of Life, Oxford: Clarendon Press.

Sen, A. (2004). Capabilities, Lists, and Public Reason: Continuing the Conversation. ***Feminist Economics***, 10(3), 77-80. doi: 10.1080/1354570042000315163

Shonkoff, J., & Phillips, D. (2004). From neurons to neighborhoods. Washington (D.C.): National academy Press. Shorrocks, A. F. 1982. Inequality decomposition by factor components. Econometrica 50: 193–212.

Stark, O., Taylor, J., & Yitzhaki, S. (1986). Remittances and Inequality. ***The Economic Journal,*** 96(383), 722. doi: 10.2307/2232987

Thu Le, H., & Booth, A. (2013). Inequality in Vietnamese Urban-Rural Living Standards, 1993-2006. ***Review Of Income And Wealth***, n/a-n/a. doi: 10.1111/roiw.12051

Toan, N., Trong, L., Höjer, B., & Persson, L. (2002). Public health services use in a mountainous area, Vietnam: implications for health policy. ***Scandinavian Journal Of Public Health***, 30(2), 86-93. doi: 10.1177/14034948020300020201

Transparency International - Vietnam. (2019). Retrieved 13 April 2020, from https://www.transparency.org/country/VNM

Tran, T., Nguyen, C., & Van Vu, H. (2017). Does Economic Inequality Affect the Quality of Life of Older People in Rural Vietnam?. ***Journal Of Happiness Studies***, 19(3), 781-799. doi: 10.1007/s10902-017-9851-4

Truong, B.T. & Le, Q.T. (2016). ***Assessing Vietnam's tax incentive policies***. Oxfam and UN Women Research Report.

UNFPA. (2017). ***Exploring barriers to accessing maternal health and family planning services in ethnic minority communities in Viet Nam***. Hanoi. [Ebook]. Retrieved from https://vietnam.unfpa.org/sites/default/files/pub-pdf/Web_Barriers%20to%20accessing%20maternal%20health%20and%20FP%20services%20in%20ethnic%20minority%20communities%20in%20VN.pdf

UNFPA. (2008). ***Reproductive health of H'mong people in Ha Giang Province***. Hanoi. [Ebook]. Retrieved from https://vietnam.unfpa.org/sites/default/files/pub-pdf/RH_HMong_HaGiang_Eng_0.pdf

UNICEF Viet Nam. (2016). Out-of-school Children: ***Viet Nam Country Study 2016***. UNICEF Viet Nam. Retrieved from https://www.unicef.org/vietnam/reports/out-school-children-report-2016

UNICEF Viet Nam. (2019). ***The Integrated Early Childhood Development Programme 2017-2021 of UNICEF: Baseline Assessment Report***. UNICEF Viet Nam. Retrieved from https://www.unicef.org/vietnam/reports/integrated-early-childhood-development-programme-2017-2021-unicef

Vu, H. (2012). Determinants of educational expenditure in Vietnam. The IUP Journal of Applied Economics, 9, 59-72.

Vu, K. (2018). More than 3,000 Vietnamese fell victim to human traffickers in 2012-2017. Retrieved 10 April 2020, from https://www.reuters.com/article/us-vietnam-trafficking/more-than-3000-vietnamese-fell-victim-to-human-traffickers-in-2012-2017-idUSKCN1L90LI

WHO (2017). Diarrhoeal disease. https://www.who.int/news-room/fact-sheets/detail/diarrhoeal-disease

Williams, B., Gouws, E., Boschi-Pinto, C., Bryce, J., & Dye, C. (2002). Estimates of world-wide distribution of child deaths from acute respiratory infections. ***The Lancet Infectious Diseases***, 2(1), 25-32. doi: 10.1016/s1473-3099(01)00170-0

World Bank. (2014). Taking stock: an update on Vietnam's recent economic development (English). Washington, DC: World Bank Group. http://documents.worldbank.org/curated/en/641241468133544451/Taking-stock-an-update-on-Vietnams-recent-economic-development

World Bank. (2018). World Development Indicators, the World Bank.

World Bank. (2010). ***Vietnam Development Report 2010: Modern Institutions***. The World Bank Vietnam.

In Vietnamese

CEMA, UNDP & MDRI (2017), Dân tộc thiểu số với Mục tiêu phát triển Thiên niên kỷ: Ai đến trước ai về sau? Kết quả phân tích từ số liệu Điều tra về thực trạng kinh tế xã hội của 53 dân tộc thiểu số năm 2015. Báo cáo do Ủy ban dân tộc, Chương trình phát triển Liên hiệp quốc và Viện Nghiên cứu phát triển Mekong thực hiện.

Department of Health in Kon Tum province: ***ĐẶC ĐIỂM NHIỄM KHUẨN HÔ HẤP CẤP TÍNH Ở TRẺ EM DƯỚI 5 TUỔI ĐIỀU***

TRỊ TẠI KHOA NHI BỆNH VIỆN ĐA KHOA KHU VỰC NGỌC HỒI NĂM 2016. (2016). [Ebook]. Retrieved from http://syt.kontum.gov.vn/Uploads/files/NCKH/N%C4%83m%202017/2_Thanh%20Minh%20Hung_Nhiem%20khuan%20ho%20hap%20cap%20tinh%20o%20tre%20em.pdf

Do, T. (2019). Tỷ lệ dân số từ 15 tuổi trở lên biết đọc, biết viết tăng mạnh. Retrieved 10 April 2020, from https://giaoduc.net.vn/giao-duc-24h/ty-le-dan-so-tu-15-tuoi-tro-len-biet-doc-biet-viet-tang-manh-post200335.gd

[Download] Báo cáo tình trạng sử dụng Di động tại Nông thôn Việt Nam 2018/2019. (2020). Retrieved 29 March 2020, from https://advertisingvietnam.com/2019/04/bao-cao-tinh-trang-su-dung-di-dong-tai-nong-thon-viet-nam-2018-2019/

KẾT QUẢ TỔNG ĐIỀU TRA DÂN SỐ VÀ NHÀ Ở NĂM 2019. (2019). Retrieved 10 April 2020, from https://vietnam.unfpa.org/vi/news/k%E1%BA%BFt-qu%E1%BA%A3-t%E1%BB%95ng-%C4%91i%E1%BB%81u-tra-d%C3%A2n-s%E1%BB%91-v%C3%A0-nh%C3%A0-%E1%BB%9F-n%C4%83m-2019

Magazine of scientific and technological information of Quang Binh province: THỰC TRẠNG LOÃNG XƯƠNG CỦA PHỤ NỮ MÃN KINH ĐẾN KHÁM TẠI BỆNH VIỆN HỮU NGHỊ VIỆT NAM - CUBA ĐỒNG HỚI. (2018). Tạp Chí Thông Tin Khoa Học & Công Nghệ Quảng Bình, (5/2018). Retrieved from https://skhcn.quangbinh.gov.vn/3cms/upload/khcn/File/TapChiKHCN/2018/so5/24.pdf

People's Committee in Tuyen Quang province: Hoạt động giám sát của HĐND huyện Yên Sơn: Chất lượng đi đôi với trách nhiệm. (2018). Retrieved 10 April 2020, from http://hdndtuyenquang.gov.vn/tin-hoat-dong/hdnd-huyen-thanh-pho/hoat-dong-giam-sat-cua-hdnd-huyen-yen-son-chat-luong-di-doi-voi-trach-nhiem-315.html

THỰC TRẠNG VÀ GIẢI PHÁP CHO VIỆC PHÁT TRIỂN NGUỒN NHÂN LỰC GIÁO DỤC HÒA NHẬP TRẺ KHUYẾT TẬT Ở VIỆT NAM. (2020). Retrieved 10 April 2020, from http://www.ced.org.vn/bai-viet/thuc-trang-va-giai-phap-cho-viec-phat-trien-nguon-nhan-luc-giao-duc-hoa-nhap-tre-khuyet-tat-o-viet-nam.html

Tổng cục Thống kê (GSO). (2019). ***Báo cáo sơ bộ Tổng điều tra Dân số và nhà ở 2019***. Retrieved from https://www.gso.gov.vn/default.aspx?tabid=512&idmid=5&ItemID=19279

Truong, D. (2019). Thực trạng và định hướng sắp xếp cơ sở giáo dục nghề nghiệp trong thời gian tới. Retrieved 15 April 2020, from https://gdnn.edu.vn/giao-duc-nghe-nghiep/thuc-trang-va-dinh-huong-sap-xep-co-so-giao-duc-nghe-nghiep-trong-thoi-gian-toi-203.html

APPENDIX

APPENDIX 1: MONETARY INEQUALITY

Income or expenditure inequality is measured by the three most common indices: Gini, Theil L, and Theil T. The Gini coefficient, which is based on the Lorenz curve, is the most widely used to measure inequality due to its straightforward calculation, flexibility across different population groups, and independence from sample size and scale of the economy. The Gini coefficient is estimated by the difference between the distribution of income and the uniform distribution that represents equality (Deaton, 1997):

$$G = \frac{(n+1)}{(n-1)} - \frac{2}{(n(n-1)\bar{Y}} \sum_{i=1}^{n} \rho i \, Yi, \quad (1)$$

where ρ is the rank of individual i by their income. is equal to 1 for the richest and increases for individuals with a lower income. The Gini coefficient lies in the range of 0 to 1, with a higher Gini coefficient representing greater income inequality.

The Theil L index of inequality is calculated as follows:

$$\text{Theil}_L = \frac{1}{n} \sum_{i=1}^{n} \ln\left(\frac{\bar{Y}}{Y_i}\right), \quad (2)$$

The Theil L index ranges from 0 to infinity. A higher value of Theil L indicates more inequality.

The Theil T index of inequality is calculated as follows:

$$\text{Theil}_T = \frac{1}{n} \frac{\bar{Y}}{Y_i} \sum_{i=1}^{n} \ln\left(\frac{\bar{Y}}{Y_i}\right), \quad (3)$$

The Theil T index ranges from 0 (lowest inequality) to ln(N) (highest inequality).

Inequality decomposition

The overall inequality which is measured by Theil indexes can be decomposed into inequality within groups (e.g. urban and rural areas, or Kinh and ethnic miniorities) and inequality between groups. For example, the Theil T index can be decomposed as follows:

$$\text{Theil}_T = \sum_{i=1}^{m} s_i T_i + \sum_{i=1}^{m} s_i \ln\left(\frac{\bar{Y}}{Y_i}\right) \text{ with } s_i = \frac{n_i}{n} \frac{Y_1}{\bar{Y}} \quad (4)$$

Ti is the Theil index of within inequality of group i, n_i is the population size, and $\bar{Y}_i$ is the mean income or expenditure of group i.

Although the Gini index cannot be decomposed into within- and between-inequality components like the Theil index, it can be decomposed into inequality components of income sources (Shorrocks, 1982; Stark et al., 1986; L´opez-Feldman, 2006). The Gini index of the total income or expenditure can be written as the weighted average of Gini of different income sources:

$$G = \sum_{k=1}^{k} s_k G_k R_k, \quad (5)$$

where sk is the share of income from source k in the total income, Gk is the Gini index of income from source k, and Rk is the Gini correlation of income from source k with the distribution of the total income. (6)

Lerman & Yitzhaki (1985) estimate the elasticity of the total Gini to a change in income source k as follows:

$$\frac{(\partial G/e)}{G} = \frac{s_k G_k R_k}{G} - Sk \quad (6)$$

(6) R_k=Cov[y_k,F(y)]/Cov[y_k,F(y_k)], with F(y) and F(y_k) the cumulative distributions of the total income and income from source k.

It measures the percent change in the total inequality resulting from a small percent change in income from source k.

Using the above two decomposition methods allows understanding the drivers of inequality in income and expenditure in Vietnam.

APPENDIX 2: ADDITIONAL TABLES

Table A.1. Indicators in domains

Domains	Indicators
Life and health	3.1. Health status and treatment • Percentage of people getting sick in the past 12 months • Number of sick days • Prevalence of disability • Percentage of people with health insurance • Number of health visits • Distance from village to the nearest hospital • Annual out-of-pocket expenditure on healthcare 3.2. Life expectancy and mortality • Inequality in life expectancy • Specific-cause mortality rates 3.3. Healthy life • Access to clean water and improved sanitation facilities • Poverty rate • Health condition of children under 5 • Percentage of children aged 0-59 months with diarrhoea or acute respiratory infection (ARI) • Proportion of tobacco consumption
Education and learning	4.1. Basic skills • Proportion of children below 5 with purchased toys • Number of comic books per child (children below 18) • Percentage of children aged 36-59 months who are developmentally on track • Math and literature scores of grade-5 students 4.2. Educational attainment • School enrolment of 2 levels: (a) kindergarten; (b) primary and secondary school • Proportion of people aged 18-22 attending college • School enrolment at all levels • Proportion of people aged 25 and over with tertiary education • Educational attainment of people aged 25 and over • Spending on education of students • Spending on other training activities 4.3. Access to information and technology necessary to participate in society • Percentage of people living in households with a telephone

Domains	Indicators
Participation, influence, and voice	5.1. Political participation and activity • Inequality in voter turnout in national or local elections • Percentage who have formally contacted local representatives/national government representatives/political party in the last 12 months 5.2. Perceived influence • Percentage who feel they can influence decisions affecting their local area

Table A.2. Income inequality measures

Year	Gini	Theil's L	Theil's T	Ratio 90th/10th	Ratio 95th/5th
2002	0.409	0.279	0.340	5.6	9.6
2004	0.396	0.262	0.290	5.7	9.9
2006	0.386	0.248	0.281	5.5	8.8
2008	0.421	0.299	0.365	6.0	10.8
2010	0.424	0.312	0.388	6.6	11.0
2012	0.401	0.279	0.313	6.6	11.0
2014	0.385	0.262	0.266	6.5	11.2
2016	0.385	0.264	0.267	6.4	11.1

Source: Estimations from VHLSSs

Table A.3. Electricity consumption inequality measures

Year	Gini	Theil's L	Theil's T	Ratio 90th/10th	Ratio 95th/5th
2002	0.49	0.42	0.47	8.8	17.1
2004	0.49	0.43	0.47	10.0	19.7
2006	0.49	0.42	0.46	9.0	17.6
2008	0.50	0.43	0.48	9.2	19.1
2010	0.52	0.49	0.50	11.7	22.5
2012	0.46	0.38	0.37	9.6	18.8
2014	0.44	0.36	0.33	9.1	18.2
2016	0.42	0.34	0.31	9.0	19.6

Source: Estimations from VHLSSs

Table A.4. Housing-value inequality measures

Year	Gini	Theil's L	Theil's T	Ratio 90th/10th	Ratio 95th/5th
2010	0.716	1.117	1.117	46.7	120.0
2012	0.652	0.881	0.841	31.9	80.0
2014	0.635	0.823	0.823	29.2	74.3
2016	0.618	0.769	0.781	25.0	60.0

Source: Estimations from VHLSSs

Table A.5. Healthcare visits during 2010-2016

Groups	% people with healthcare visits during the past 12 months		Average number of healthcare visits during the past 12 months	
	VHLSS 2010	VHLSS 2016	VHLSS 2010	VHLSS 2016
Gender				
Male	36.6	34.8	1.295	1.161
Female	45.1	44.1	1.688	1.632
Ethnicity				
Ethnic minorities	34.6	32.4	0.979	0.920
Kinh	42.1	41.1	1.592	1.501
Ethnic groups				
Kinh	42.1	41.1	1.592	1.501
Tay	40.6	33.9	1.164	0.876
Thai	26.6	33.2	0.472	0.703
Khmer	40.0	47.6	2.153	2.199
Muong	23.2	28.8	0.552	0.805
Nung	37.4	33.7	0.860	0.878
H'Mong	22.1	21.2	0.360	0.381
Dao	30.1	29.7	0.546	0.686
Others	40.2	32.9	1.152	0.988
Education of hh. Head				
Less than primary	42.2	41.0	1.844	1.689
Primary education	41.3	38.4	1.523	1.367
Lower secondary education	37.4	36.5	1.187	1.173
Upper secondary education	41.3	41.6	1.415	1.422
Post-secondary education	47.1	44.8	1.533	1.467
Poverty status				
Non-poor	42.6	40.3	1.619	1.457
Poor	34.6	33.1	1.025	0.918

Groups	% people with healthcare visits during the past 12 months		Average number of healthcare visits during the past 12 months	
	VHLSS 2010	VHLSS 2016	VHLSS 2010	VHLSS 2016
Expenditure quintiles				
Poorest	34.5	33.7	1.017	1.021
Near poorest	39.6	38.5	1.427	1.403
Middle	41.7	40.4	1.623	1.456
Near richest	43.2	40.7	1.676	1.502
Richest	45.6	44.6	1.737	1.630
Urban/rural areas				
Rural	40.4	38.5	1.430	1.326
Urban	42.1	41.9	1.652	1.566
Regions				
Red River Delta	37.2	36.8	1.086	1.082
Northern Mountains	34.1	30.6	0.811	0.760
Northern and Coastal Central	38.0	37.1	1.095	1.096
Central Highlands	46.2	38.8	1.434	1.043
Southeast	43.4	41.9	1.778	1.655
Mekong Delta	50.3	51.6	2.755	2.604
Total	40.9	39.6	1.496	1.402

Source: Estimations from VHLSSs

Table A.6. Average number of annual healthcare visits in hospitals during 2010-2016

Groups	Number of healthcare visits in district-level hospital		Number of healthcare visits in province-level hospital		Number of healthcare visits in central-level hospital	
	VHLSS 2010	VHLSS 2016	VHLSS 2010	VHLSS 2016	VHLSS 2010	VHLSS 2016
Gender						
Male	0.251	0.287	0.208	0.194	0.059	0.067
Female	0.341	0.426	0.246	0.265	0.072	0.096
Ethnicity						
Ethnic minorities	0.207	0.266	0.072	0.087	0.009	0.015
Kinh	0.314	0.377	0.257	0.260	0.076	0.096
Ethnic groups						
Kinh	0.314	0.377	0.257	0.260	0.076	0.096
Tay	0.276	0.310	0.105	0.139	0.017	0.032
Thai	0.153	0.216	0.032	0.058	0.006	0.002

Groups	Number of healthcare visits in district-level hospital		Number of healthcare visits in province-level hospital		Number of healthcare visits in central-level hospital	
	VHLSS 2010	VHLSS 2016	VHLSS 2010	VHLSS 2016	VHLSS 2010	VHLSS 2016
Khmer	0.347	0.577	0.129	0.207	0.007	0.032
Muong	0.173	0.302	0.035	0.078	0.006	0.015
Nung	0.153	0.149	0.062	0.074	0.013	0.035
H'Mong	0.053	0.050	0.011	0.014	0.000	0.000
Dao	0.086	0.121	0.026	0.060	0.001	0.002
Others	0.236	0.307	0.095	0.085	0.010	0.015
Education of hh. Head						
Less than primary	0.380	0.466	0.173	0.206	0.034	0.035
Primary education	0.329	0.340	0.199	0.195	0.049	0.064
Lower secondary education	0.227	0.311	0.208	0.191	0.057	0.072
Upper secondary education	0.259	0.351	0.258	0.313	0.085	0.116
Post-secondary education	0.252	0.303	0.512	0.340	0.212	0.213
Poverty status						
Non-poor	0.317	0.373	0.274	0.249	0.081	0.091
Poor	0.221	0.228	0.052	0.059	0.007	0.006
Expenditure quintiles						
Poorest	0.215	0.283	0.052	0.084	0.007	0.014
Near poorest	0.327	0.380	0.123	0.166	0.022	0.033
Middle	0.326	0.356	0.209	0.214	0.045	0.062
Near richest	0.321	0.390	0.299	0.274	0.076	0.110
Richest	0.297	0.381	0.455	0.414	0.178	0.191
Urban/rural areas						
Rural	0.271	0.341	0.158	0.165	0.047	0.057
Urban	0.358	0.396	0.393	0.370	0.110	0.136
Regions						
Red River Delta	0.207	0.242	0.180	0.158	0.127	0.153
Northern Mountains	0.196	0.211	0.089	0.096	0.038	0.037
Northern and Coastal Central	0.269	0.290	0.140	0.180	0.045	0.066
Central Highlands	0.199	0.201	0.188	0.172	0.028	0.030
Southeast	0.414	0.514	0.496	0.417	0.065	0.086
Mekong Delta	0.449	0.627	0.284	0.347	0.044	0.061
Total	0.297	0.358	0.228	0.230	0.065	0.082

Source: Estimations from VHLSSs

Table A.7. Distance from village to the nearest hospital during 2010-2016

Groups	Distance from village to the nearest district-level hospital (km)		Distance from village to the nearest provincial-level or central-level hospital (km)	
	VHLSS 2010	VHLSS 2016	VHLSS 2010	VHLSS 2016
Gender				
Male	13.0	13.1	25.2	30.8
Female	12.6	13.1	25.1	30.7
Ethnicity				
Ethnic minorities	20.7	21.1	32.2	46.4
Kinh	10.2	10.3	22.8	25.3
Ethnic groups				
Kinh	10.2	10.3	22.8	25.3
Tay	16.7	18.1	22.2	30.8
Thai	26.2	22.6	59.1	65.0
Khmer	9.9	12.7	19.2	22.0
Muong	13.7	15.3	33.4	51.5
Nung	17.9	17.1	17.9	42.9
H'Mong	27.9	31.0	43.4	67.2
Dao	29.1	23.9	22.7	32.9
Others	21.0	21.0	28.8	43.6
Education of hh. Head				
Less than primary	15.6	17.1	27.3	36.2
Primary education	12.6	13.0	26.8	30.1
Lower secondary education	10.8	11.3	22.2	29.3
Upper secondary education	11.2	9.8	23.0	25.3
Post-secondary education	12.8	9.6	21.6	24.8
Poverty status				
Non-poor	10.7	11.3	22.5	27.5
Poor	17.6	22.6	31.1	48.1
Expenditure quintiles				
Poorest	17.8	19.1	31.3	42.6
Near poorest	12.1	11.9	24.3	28.5
Middle	10.4	10.5	23.5	25.4
Near richest	10.5	9.6	21.7	23.9
Richest	8.7	8.7	17.2	22.1
Regions				
Red River Delta	6.9	7.2	16.7	19.5
Northern Mountains	18.9	19.3	25.5	41.7

Groups	Distance from village to the nearest district-level hospital (km)		Distance from village to the nearest provincial-level or central-level hospital (km)	
	VHLSS 2010	VHLSS 2016	VHLSS 2010	VHLSS 2016
Northern and Coastal Central	13.0	13.0	35.1	36.8
Central Highlands	16.6	16.0	34.1	36.3
Southeast	11.4	11.3	21.3	25.3
Mekong Delta	11.2	11.8	20.3	23.9
Total	12.8	13.1	25.1	30.7

Source: Estimations from VHLSSs

Table A.8. Per capita out-of-pocket spending on healthcare during 2010-2016

Groups	Per capita out-of-pocket spending on healthcare (thousand VND, current price)		Per capita out-of-pocket spending on healthcare per healthcare visit (thousand VND, current price)	
	VHLSS 2010	VHLSS 2016	VHLSS 2010	VHLSS 2016
Gender				
Male	516	875	583	1141
Female	623	999	545	857
Ethnicity				
Ethnic minorities	213	467	285	650
Kinh	637	1035	604	1,032
Ethnic groups				
Kinh	637	1035	604	1,032
Tay	237	847	264	1,077
Thai	186	567	463	982
Khmer	334	563	194	274
Muong	320	500	602	976
Nung	152	504	215	695
H'Mong	44	67	132	229
Dao	113	218	317	460
Others	216	424	240	499
Education of hh. Head				
Less than primary	463	766	396	693
Primary education	594	810	533	890
Lower-secondary education	505	952	628	1,132
Upper-secondary education	625	1,177	665	1,181
Post-secondary education	947	1,191	728	1,060
Poverty status				

Groups	Per capita out-of-pocket spending on healthcare (thousand VND, current price)		Per capita out-of-pocket spending on healthcare per healthcare visit (thousand VND, current price)	
	VHLSS 2010	VHLSS 2016	VHLSS 2010	VHLSS 2016
Non-poor	683	1,027	636	1,046
Poor	140	153	211	250
Expenditure quintiles				
Poorest	138	273	210	392
Near poorest	312	518	378	620
Middle	492	723	511	812
Near richest	666	1,098	613	1,025
Richest	1,246	2,083	986	1,844
Urban/rural areas				
Rural	520	864	535	970
Urban	691	1,098	623	996
Regions				
Red River Delta	648	1,245	796	1,489
Northern Mountains	350	569	504	1,106
Northern and Coastal Central	490	769	616	897
Central Highlands	530	850	531	965
Southeast	749	983	523	872
Mekong Delta	592	1,031	360	600
Total	571	939	562	979

Source: Estimations from VHLSSs

Table A.9. Proportion of children with toys and books during 2010-2016 (%)

	% children below 5 with purchased toys		% children below 5 with home-made toys		The number of comic books (age below 18)	
	VHLSS 2010	VHLSS 2016	VHLSS 2010	VHLSS 2016	VHLSS 2010	VHLSS 2016
Gender						
Male	70.4	78.5	16.2	19.7	3.10	3.60
Female	69.5	75.6	12.7	18.6	3.10	3.76
Ethnicity						
Ethnic minorities	33.4	51.7	17.4	31.1	1.16	1.53
Kinh	78.3	84.0	13.9	15.9	3.57	4.24
Ethnic groups						
Kinh	78.3	84.0	13.9	15.9	3.57	4.24
Tay	50.2	68.3	13.7	17.3	1.74	2.42

	% children below 5 with purchased toys		% children below 5 with home-made toys		The number of comic books (age below 18)	
	VHLSS 2010	VHLSS 2016	VHLSS 2010	VHLSS 2016	VHLSS 2010	VHLSS 2016
Thai	22.7	54.0	22.2	27.2	0.46	0.72
Khmer	42.5	71.9	19.2	32.6	1.13	1.03
Muong	36.8	73.6	23.9	40.8	1.15	2.39
Nung	36.7	69.3	7.5	24.4	0.79	2.28
H'Mong	10.6	29.5	21.3	51.9	0.55	1.48
Dao	26.6	33.1	23.4	24.7	1.25	0.52
Others	36.5	46.8	13.6	24.1	1.52	1.57
Education of hh. Head						
Less than primary	54.8	59.4	17.8	21.5	1.72	2.17
Primary education	64.3	74.3	13.3	21.6	2.54	3.39
Lower secondary education	74.9	82.6	16.4	18.8	3.31	3.50
Upper secondary education	81.7	84.4	12.9	15.7	4.59	4.88
Post-secondary education	92.1	92.7	7.0	16.2	6.27	6.70
Poverty status						
Non-poor	81.2	83.4	11.4	16.8	3.84	4.12
Poor	42.5	41.5	22.0	32.3	1.22	1.10
Expenditure quintiles						
Poorest	42.0	53.9	22.4	28.3	1.21	1.58
Near poorest	69.4	79.4	13.4	19.8	2.34	2.66
Middle	78.4	87.0	12.8	15.4	3.32	4.05
Near richest	87.9	90.2	8.1	11.9	4.46	5.11
Richest	92.8	91.6	10.6	13.1	5.97	6.77
Urban/rural areas						
Rural	62.7	72.4	17.3	22.8	2.41	2.85
Urban	87.3	88.3	8.0	10.4	5.05	5.70
Regions						
Red River Delta	84.3	89.6	15.6	19.7	4.27	4.94
Northern Mountains	45.0	62.7	16.9	24.5	1.78	2.34
Northern and Coastal Central	61.6	70.0	15.7	22.6	2.48	3.24
Central Highlands	67.6	56.2	13.4	18.6	3.04	2.88
Southeast	87.8	90.8	7.9	11.3	4.55	5.67
Mekong Delta	69.0	78.4	15.4	15.3	2.59	2.61
Total	70.0	77.1	14.5	19.2	3.10	3.68

Source: Estimations from VHLSSs

Table A.10. The schooling rate in 2010 (%)

	% attending kindergarten, aged 3-5	% attending primary and secondary school, aged 6-14	% attending high school, aged 15-17	% attending college, aged 18-22
Gender				
Male	55.8	94.0	65.6	36.5
Female	54.4	95.7	70.3	40.8
Ethnicity				
Ethnic minorities	45.4	89.9	48.4	13.6
Kinh	57.4	96.1	72.5	43.7
Ethnic groups				
Kinh	57.4	96.1	72.5	43.7
Tay	77.9	96.7	67.4	23.3
Thai	62.7	91.8	46.4	9.4
Khmer	35.8	79.8	26.2	4.1
Muong	54.8	95.9	40.3	10.9
Nung	52.2	98.2	58.5	17.3
H'Mong	43.7	79.7	40.2	10.4
Dao	44.4	85.8	46.4	4.4
Others	28.5	89.2	47.4	14.9
Education of hh. Head				
Less than primary	38.3	88.0	44.9	17.8
Primary education	47.9	95.7	61.3	27.5
Lower secondary education	60.2	97.8	76.3	43.2
Upper secondary education	72.9	98.6	87.3	57.8
Post-secondary education	74.2	99.2	90.8	79.1
Poverty status				
Non-poor	61.3	96.7	74.6	45.3
Poor	40.2	90.3	46.1	7.7
Expenditure quintiles				
Poorest	39.6	90.3	45.3	7.6
Near poorest	50.8	94.4	63.4	24.6
Middle	58.5	96.0	71.8	36.1
Near richest	65.8	98.4	79.6	50.1
Richest	74.6	99.3	88.5	66.9
Urban/rural areas				
Rural	50.9	93.9	63.7	32.5
Urban	65.7	97.9	80.7	54.8

	% attending kindergarten, aged 3-5	% attending primary and secondary school, aged 6-14	% attending high school, aged 15-17	% attending college, aged 18-22
Regions				
Red River Delta	70.5	98.3	78.7	51.3
Midlands and Northern Mountains	62.1	94.9	65.3	26.1
Northern and Coastal Central	56.2	95.2	68.2	41.2
Central Highlands	41.0	93.5	62.3	33.5
Southeast	55.8	95.6	70.5	43.7
Mekong Delta	35.8	90.6	56.2	25.0
Total	55.2	94.8	67.9	38.7

Source: Estimations from VHLSSs

Table A.11. Proportion of individuals voting in the recent election (%)

	% voting for People's Council		% voting for National Assembly	
	Year 2013	Year 2018	Year 2013	Year 2018
Gender				
Male	86.8	85.9	85.8	89.1
Female	70.3	70.3	70.8	71.7
Ethnicity				
Ethnic minorities	79.6	80.4	81.6	80.7
Kinh	78.5	78.1	77.9	80.5
Education				
Less than primary	74.7	65.3	73.3	66.8
Primary education	76.3	75.1	74.1	75.2
Lower secondary education	80.0	80.6	80.0	81.9
Upper secondary education	85.5	85.0	86.8	87.2
Post-secondary education	83.1	84.2	90.3	92.7
Poverty status				
Non-poor	78.3	78.9	78.3	80.8
Poor	81.4	71.9	79.5	78.0
Wealth index quintile				
Poorest	81.6	70.2	78.8	73.3
Near poorest	75.9	76.3	75.4	75.9
Middle	78.6	78.8	76.2	79.6
Near richest	75.7	81.5	74.2	85.1
Richest	82.0	83.1	86.9	86.9

	% voting for People's Council		% voting for National Assembly	
	Year 2013	Year 2018	Year 2013	Year 2018
Urban/rural				
Rural	77.1	75.4	77.2	77.6
Urban	83.8	81.5	82.2	83.8
Regions				
Red River Delta	76.2	75.4	76.9	76.5
Midlands and Northern	74.7	80.9	73.9	80.4
Northern and Coastal	80.5	75.6	79.9	80.0
Central Highlands	88.7	83.5	86.6	83.5
Southeast	81.7	82.7	82.0	83.0
Mekong Delta	76.8	78.1	75.8	81.7
Total	78.7	78.4	78.4	80.6

Source: Estimations from the PAPI surveys.

APPENDIX 3: QUALITATIVE TOOLS

Appendix 3 - Qualitative Tools.do

https://drive.google.com/file/d/1zvO_027Az9PziWyutK5CcFA77LwmEvyR/view

RESEARCH REPORT*

MULTIDIMENSIONAL INEQUALITY IN VIETNAM

Oxfam Viet Nam
Add: **22 Le Dai Hanh Street, Hanoi, Viet Nam**
Tel: **+84 243 945 4448**
Website: **vietnam.oxfam.org**

*(*not for sale)*

Funded by the Development Cooperation Instrument of the European Union

AFD AGENCE FRANÇAISE DE DÉVELOPPEMENT

OXFAM

MDRI Mekong Development Research Institute
Power of Knowledge