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# Well Begun, Not Yet Done: Vietnam's Remarkable Progress on Poverty Reduction and the Emerging Challenges



WORLD BANK

**2012 Vietnam Poverty Assessment**

**Well Begun, Not Yet Done:**  
Vietnam's Remarkable Progress  
on Poverty Reduction and the  
Emerging Challenges

**World Bank in Vietnam  
Hanoi, 2012**

# Acronyms

AC	Agricultural Census
ADB	Asian Development Bank
ASEAN	Association of Southeast Asian Nations
CAF	Center for Analysis and Forecasting
CBN	Cost of Basic Needs
CPI	Consumer Price Index
CPRGS	Comprehensive Poverty Reduction and Growth Strategy
CPS	Country Partnership Strategy
CSA	Country Social Analysis
DFID	Department for International Development (UK)
DOLISA	District-level MOLISA staff
DPT1	Diphtheria, Pertussis, and Tetanus, first immunization
EA	Enumeration Area
EAP	East Asia and Pacific (WB)
ELL	Elbers, Lanjouw, and Lanjouw
FDI	Foreign Direct Investment
FGT	Foster-Greer-Thorbecke
FGT0	Poverty headcount
FGT1	Poverty gap
FGT2	Squared poverty gap
GAPAP	Governance and Poverty Policy Analysis and Advice
GDI	Gender Development Index
GDP	Gross Domestic Product
GSO	General Statistics Office
HCMC	Ho Chi Minh City
HCR	Headcount Rate
HDI	Human Development Index
HOI	Human Opportunity Index
ILSSA	Institute of Labour, Science, and Social Affairs
IMF	International Monetary Fund
L	Large
M	Medium
MCP	Monetary Child Poverty (rate)
MDCP	Multi-dimensional Child Poverty (rate)
MDG	Millennium Development Goal
MICS	Multi-Indicator Cluster Survey
MOC	Ministry of Construction
MOET	Ministry of Education and Training
MOH	Ministry of Health
MOLISA	Ministry of Labor, Invalids, and Social Affairs
MPI	Ministry of Planning and Investment
MPI	Multi-dimensional Poverty Index
NGO	Non-Governmental Organization
NHDR	National Human Development Report (UNDP)

NSS	National Sample Survey
NTP-PR	National Targeted Program for Poverty Reduction
NTP-SPR	National Targeted Program for Sustainable Poverty Reduction
PA	Poverty Assessment
PAPI	Public Administration Performance Index
PM	Prime Minister
POVCALNET	PovcalNet, the WB's online poverty analysis tool
PPA	Participatory Poverty Assessment
PPP	Purchasing Power Parity
PREM	Poverty Reduction and Economic Management
PRSP	Poverty Reduction Strategy Paper
RAFC	Rural Agriculture and Fishery Census
RCS	Ravallion, Chen, and Sangraula
RIM	Rural Impact Monitoring
S	Small
SCOLI	Spatial Cost of Living Index
SEDP	Socio-Economic Development Plan
SEDS	Socio-Economic Development Strategy
SOE	State-owned enterprise
SPB	Social Policy Bank
TFESSD	Trust Fund for Environmentally and Socially Sustainable Development
UNDP	United Nations Development Program
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VASS	Vietnam Academy of Social Sciences
VBA	Vietnam Bank for Agriculture
VDR	Vietnam Development Report
VHLSS	Vietnam Household Living Standards Survey
VLSS	Vietnam Living Standards Survey
VND	Vietnam Dong
VPHC	Vietnam Population and Housing Census
WB	World Bank
WDI	World Development Indicators
WHO	World Health Organization
WTO	World Trade Organization
XL	Extra large
XS	Extra small

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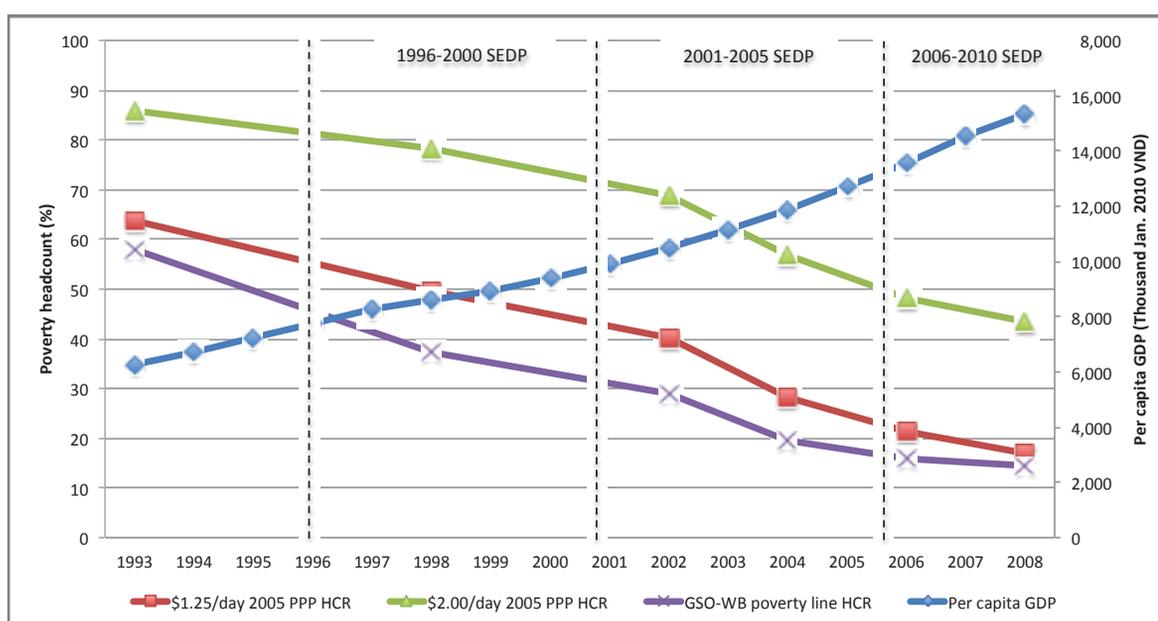
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## EXECUTIVE SUMMARY

Vietnam's record on economic growth and poverty reduction over the last two decades has been remarkable. Using a "basic needs" poverty line initially agreed in the early 1990s<sup>1</sup>, the poverty headcount fell from 58 percent in the early 1990s to 14.5 percent by 2008, and by these standards was estimated to be well below 10 percent by 2010. Similar progress in the face of steadily rising incomes is evident when assessed by "international" standards of \$1.25 and \$2.00 person/day (2005 PPP). Progress has also been substantial in other dimensions of well-being, ranging from high primary and secondary enrolments to improvements in health status and reduced morbidity and mortality. Vietnam has achieved and in some cases surpassed many of the Millennium Development Goals (MDGs).

**Figure 1: Economic Growth and Poverty Reduction in Vietnam: Two Decades of Progress**



Despite remarkable progress, the task of poverty reduction in Vietnam is not complete. Vietnam's "basic needs" poverty line, agreed in the early 1990s, is very low by international standards, and the methods used to monitor poverty since the early 1990s are outdated: the poverty standards that applied to low-income Vietnam in the 1990s are no longer relevant to modern day, rising middle-income Vietnam. In addition, although tens of millions of Vietnamese households have risen out of poverty, many have incomes very close to the poverty line and remain vulnerable to falling back into poverty as a result of idiosyncratic shocks and related economy-wide shocks, such as the effects of climate change on rainfall and temperatures, human and animal influenza pandemics, and impacts of the 2008–09 global financial crisis. Economic growth has faltered in recent years as a result of continuing macro instability and sharp bouts of inflation. Despite this, citizens' aspirations are rising, and Vietnam's future development policies must reflect both its new economic realities and citizens' rising aspirations for greater prosperity and economic security.

In important respects, the task of poverty reduction has become more difficult. Vietnam's success has created new challenges. The remaining poor are harder to reach; they face difficult challenges—of isolation, limited assets, low levels of education, poor health status—and poverty reduction has

<sup>1</sup> The General Statistics Office-World Bank (GSO-WB) poverty line was constructed in the late 1990s using data collected in the 1993 Vietnam Living Standards Survey (VLSS); it was presented in the 2000 Vietnam Poverty Assessment entitled *Attacking Poverty*, carried out by the joint government/donor/NGO Poverty Working Group.

become less responsive to economic growth. Ethnic minority poverty is a growing and persistent challenge. Although Vietnam's 53 ethnic minority groups make up less than 15 percent of the population, they accounted for 47 percent of the poor in 2010, compared to only 29 percent in 1998. Using a new poverty line that better reflects living conditions of the poor (see below), 66.3 percent of minorities are poor in 2010 compared to only 12.9 percent of the Kinh majority population.

Rapid structural transformation and Vietnam's ongoing transition to a market economy have given rise to new patterns of development that bring additional challenges for poverty reduction. Inequality in incomes and opportunities are rising, underpinned by continuing disparities in human development between urban and rural areas and widening disparities within rural areas and across different socioeconomic groups. Poorer areas are still not well connected to markets. While there is good coverage of local infrastructure and basic services in most regions of the country, reliability (for example, of electricity) and quality of services is uneven. The country's push towards modernization and faster industrialization has had mixed impacts on the overall quality of life in Vietnam. Urbanization is accelerating and a growing number of workers from rural areas are migrating to the cities to work in private industry and services. Many of these jobs are informal and lack the benefits historically provided by the public sector and state-owned enterprises. There is a growing demand for young, skilled workers; many older workers do not, however, have the training or skills to compete for jobs in the expanding modern economy.

A new Poverty Assessment was launched in 2011 and finalized in December, 2012. It was led by the World Bank and the Vietnam Academy of Social Sciences (VASS), working in collaboration with the General Statistics Office (GSO) and a team of local and international consultants. The Poverty Assessment takes a fresh look at the lives of poor men, women, and children and explores the constraints and opportunities they face today in rising out of poverty. It builds on a rich body of poverty analysis and an excellent base of knowledge from previous reports and aims to do three things. First, it proposes revisions to Vietnam's poverty monitoring system—via better data, updated welfare aggregates, and new poverty lines—to bring these more in line with economic and social conditions in present-day Vietnam. Second, it revisits the stylized facts about deprivation and poverty in Vietnam, and develops an updated profile of poverty using data from the 2010 VHLSS and new qualitative field studies. Third, it aims to forge a consensus around some of the key challenges for poverty reduction in the next decade, including changing regional patterns of poverty and wealth, high and persistent poverty among ethnic minorities, and rising inequality in outcomes and opportunities.

## Improved Systems for Poverty Monitoring

Vietnam has used two very different approaches to measure poverty and monitor progress over time. Both were initiated in the early 1990s and have evolved over time.

The first approach was developed by the Ministry of Labor, Invalids, and Social Affairs (MOLISA), the agency identified by government in the early 1990s to have primary responsibility for Vietnam's poverty reduction programs and policies. MOLISA is tasked with proposing official urban and rural poverty lines at the beginning of each five-year Socio-Economic Development Plan (SEDP) and setting the initial period poverty rate. Using the official lines, MOLISA is responsible for assessing changes in poverty and updating the official list of poor households on an annual basis, using a "bottom-up" mix of local surveys and village-level consultations to count the number of poor at local (commune) levels. These local counts are then aggregated up to estimate provincial and national poverty rates. Progress is assessed against poverty reduction targets set in the SEDP. The MOLISA lines were initially based on rice equivalents but since 2005 have been calculated using a Cost-of-Basic-Needs (CBN) methodology similar to the second approach (see below) led by GSO. The official lines are not adjusted for inflation, but revised in real terms only every five years. MOLISA uses this approach to determine budget allocations and define eligibility for a number of targeted poverty reduction programs (for example, the National Targeted Program for Sustainable Poverty Reduction/NTP-SPR, Program 30a).

The second approach is led by the GSO and measures poverty and monitors progress on the basis of nationally representative household surveys. GSO uses two different methods to measure poverty—one based on official poverty lines (adjusted for inflation) applied to per capita incomes, and one using

an approach developed by a joint GSO and World Bank team in the late 1990s. The original GSO-WB poverty line was constructed using a standard Cost-of-Basic-Needs methodology, based on a reference food basket for poor households anchored in caloric norms (2,100 kilocalories per person per day) plus an additional allocation for essential nonfood needs based on consumption patterns of the poor. Unlike Vietnam's official poverty lines, the GSO-WB line was kept roughly constant in real purchasing power since the late 1990s, and applied to per capita consumption measured in successive rounds of the Vietnam Living Standards Survey (VHLSS) to estimate changes in poverty over time at the national, urban/rural, and regional level. The GSO-WB line has been used widely in Vietnam and in international fora to monitor changes in poverty since 1998. The national poverty rates reported in Figure 1 are based on the GSO-WB poverty line.

The continuing use of the two separate systems for measuring and monitoring poverty, producing widely different poverty estimates, has at times complicated the dialogue between the development community and local researchers (who typically use the GSO-WB approach) and the government (which has tended to use the official MOLISA approach). While the poverty trends from the two monitoring systems are similar—both show excellent progress—the poverty levels are very different, reflecting differences in methodology as well as differences in intended use. Vietnam's official poverty lines and methodology are constrained by resource availability; they are revised every five years in the work-up to the SEDP, and help Vietnam target scarce public resources to those most in need. In contrast, the GSO-WB poverty lines are independent of budget considerations and used only to monitor changes in poverty over time.

### Updating the GSO-WB Poverty Monitoring System

Consistency in methodology and comparability over time are two of the great strengths of Vietnam's poverty monitoring system. However, by 2009 it was clear that key aspects of the system had become outdated. The methods used to measure household well-being and construct the original basic needs poverty line were based on economic conditions and the consumption patterns of poor households in the early 1990s. Conditions have changed and Vietnam today is very different from Vietnam in the 1990s. In particular, the consumption patterns and living conditions of poor households today are substantially different from those in 1993, the reference period used to calculate the original GSO-WB poverty line.

Beginning in 2009, a team from the World Bank worked closely with local and international experts and in collaboration with the GSO to update and improve Vietnam's poverty monitoring system. The design of the 2010 VHLSS (and subsequent rounds) was improved and a new sample frame developed on the basis of the 2009 Housing and Population Census. The definition of the consumption aggregate was updated to make it a more comprehensive measure of well-being, and new spatial cost-of-living indexes (SCOLIs) were calculated using a special survey of consumer prices carried out in conjunction with the 2010 VHLSS. An updated poverty line was constructed using an approach very similar to that of the original GSO-WB poverty line, but based on up-to-date consumption patterns from the 2010 VHLSS.

The updated GSO-WB poverty line for 2010 is VND 653,000 per person per month (US \$2.26 per person per day, 2005 PPP), which is substantially higher than the original GSO-WB poverty line. The increase reflects improvements in the quality of the food reference basket (fewer calories from rice, more consumption of proteins, vegetables, and fats) and a higher allocation for essential nonfood spending, including housing and durables. The updated "extreme poverty" GSO-WB line is VND 435,000 per person per month (US \$1.50, 2005 PPP). These compare to new official poverty lines (announced in September, 2010) of VND 400,000 per person per month (US \$ 1.29, 2005 PPP) for rural areas and VND 500,000 per person per month (US \$ 1.61, 2005 PPP) for urban areas.

According to the updated GSO-WB poverty line and methodology, 20.7 percent of Vietnam's population is still poor in 2010, including 27 percent in rural areas and 6 percent in urban areas, and 8 percent of the population remains extremely poor. (Table 1) This compares to an official poverty rate of 14.2 percent based on Vietnam's official urban and rural poverty lines set for the 2011-2016 SEDP. Although the regional distribution of the poor is similar between the two approaches, poverty levels are substantially higher in aggregate according to the GSO-WB methodology. However official estimates

suggest higher poverty in urban areas, also in North Central and South Central coastal regions. The GSO-WB poverty rate is substantially higher in rural areas, in part due to differences between official poverty lines and the new GSO-WB poverty line, but also due to differences in methodology. The GSO-WB poverty rate is calculated using a nationally representative household survey (the VHLSS) and detailed measures of household welfare; in contrast, MOLISA's official poverty rates are calculated at the commune level using a combination of short-form questionnaires and local consultations, then aggregated up from the commune level to province and national levels.

Neither methodology is inherently better than the other. Rather, they are designed to serve different and equally valid objectives. The strength of the GSO-WB approach lies in consistent measurement over time and space, also its independence from budgetary or political considerations. It serves an important monitoring function. In contrast, Vietnam's official poverty lines and bottom up methodology are intended to help set targets and determine resource allocations for the government's poverty reduction and social protection programs and policies.

**Table 1: New Poverty Estimates for 2010 by Region and Urban/Rural Areas**

	WB-GSO Poverty Estimates				Official Poverty Estimates		Population Shares (%)
	Poverty		Extreme Poverty		Poverty Rate (%)	Contribution (%)	
	Poverty Rate (%)	Contribution (%)	Poverty Rate (%)	Contribution (%)			
<b>All Vietnam (national)</b>	20.7	100	8.0	100	14.2	100	100
<b>Urban</b>	6.0	9	1.5	6	6.9	6	30
<b>Rural</b>	27.0	91	10.7	94	17.4	94	70
Red River Delta (Hanoi)	11.4	12	2.8	8	8.4	13	22
East Northern Mountains	37.3	21	17.9	26	24.2	20	11
West Northern Mountains	60.1	9	36.5	14	39.4	9	3
North Central Coast	28.4	16	9.7	15	24.0	20	12
South Central coast	18.1	7	5.9	6	16.9	10	9
Central Highlands	32.8	10	17.0	13	22.2	9	6
Southeast (HCMC)	8.6	7	3.1	7	3.4	4	18
Mekong Delta	18.7	17	4.8	11	12.6	17	19

### Revisiting the Facts about Poverty and the Poor

The new GSO-WB poverty line is used to construct an updated profile of poverty based on the 2010 VHLSS, complemented by new information collected through Participatory Poverty Assessments (PPAs) and qualitative field studies. The poverty rate—defined as the proportion of the population living below the poverty line—is a widely understood and frequently reported measure of poverty. But it ignores the fact that all poor people are not the same; some have incomes or consumption levels very close to the poverty line, while others live in much poorer conditions, well below the standards set by the poverty line. The new 2010 poverty profile differentiates between the total poor (individuals living below the GSO-WB poverty line) and the extreme poor (individuals whose per-capita expenditures are less than the extreme poverty line). In 2010, 20.7 percent of the population are poor and just over a one-third of these (8 percent of the population) are extremely poor.

The updated poverty profile shows that many of the factors that characterized Vietnam's poor in the 1990s still characterize the poor today: low education achievement and limited job skills, heavy dependence on subsistence agriculture, physical and social isolation, specific disadvantages linked to ethnic identity, and exposure to natural disasters and risks. Over the past decade, rising levels of education and diversification into off-farm activities have been powerful forces for poverty reduction. The remaining poor still predominately reside in rural areas and their livelihoods depend on agriculture and related activities.

But some of the stylized facts about poverty in Vietnam have changed. Concerns about ethnic minority poverty were only beginning to emerge in the late 1990s; these have become much greater today as the gap continues to widen between minority populations (who make up 15 percent of the population) and the Kinh majority. The report documents great diversity across Vietnam's 53 ethnic minority groups, and encouraging signs of progress for some minority groups in some regions. But the concentration of minorities among the poor has continued to rise; in 1993, poverty was widespread and minorities comprised only 20 percent of all poor households. By 1998, the share of minorities among the poor had increased to 29 percent, and by 2010 minorities account for 47 percent of the total poor and a resounding 68 percent of the extreme poor. The gap in living standards between ethnic minorities and the Kinh majority is very large: 66.3 percent of ethnic minorities are still poor in 2010 compared to only 12.9 percent of the Kinh, and a resounding 37.4 percent of ethnic minorities are still extremely poor, compared to only 2.9 percent of the Kinh.

The majority of poor ethnic minorities continue to live in more isolated and less productive upland regions of Vietnam, and three-quarters of their total income comes from agriculture and allied activities. In contrast, poor Kinh have more diversified labor and earnings portfolios and live in coastal and delta regions. The depth and severity of poverty is much less for poor Kinh as compared to ethnic minorities.

Our analysis suggests that agriculture will continue to be an important source of income for many of the poor, including but not limited to ethnic minorities. Compared to many other countries, agriculture land is equitably distributed in Vietnam. Despite the rapid expansion in opportunities for off-farm employment and concomitant income diversification over the last decade, the link between landlessness and poverty has increased, particularly in the Mekong Delta,

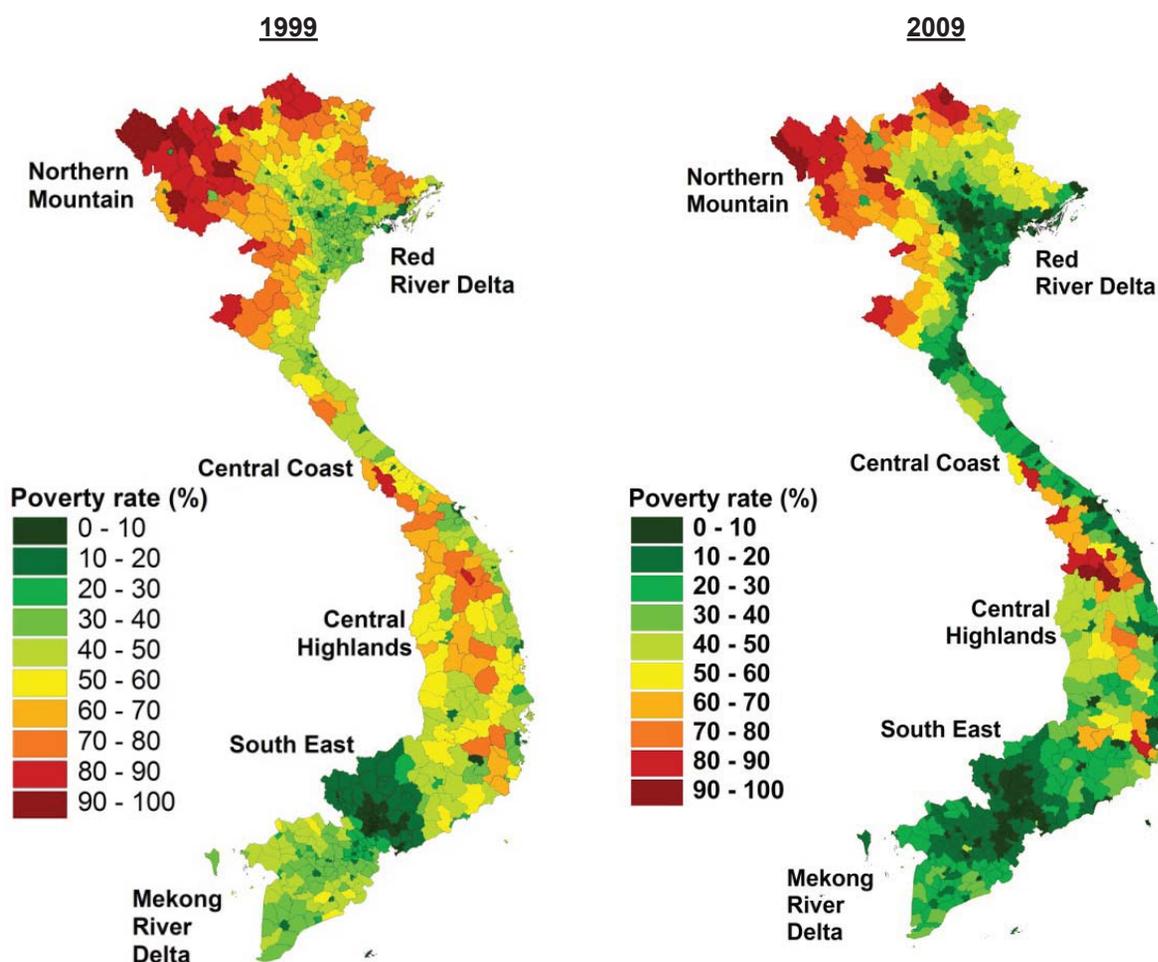
Our analysis also shows that Vietnamese today are far better educated than they were a decade ago. Primary school completion rates were high already by the end of the 1990s. Since then, there has been a rapid increase in enrolments at lower and upper secondary levels, leading to an increase in the number of students who attend colleges and universities. Lack of education continues to be an important determinate of poverty: in 2010, 46 percent of poor households and 58 percent of extreme poor households are headed by persons who have not completed primary school. Gaps persist between enrolments for children from poor and better-off households. Most primary-school-aged children—rich and poor, minority and majority—are enrolled in school. But enrolments among (poor) minorities drop off at the lower secondary level, and children from lower-income households are much less likely to be enrolled in upper secondary schools than children from better-off households, perpetuating the intergenerational transmission of poverty in Vietnam. Differential enrolments also contribute to rising inequality. According to the 2010 VHLSS, 40 percent of persons 21 years and older in the richest quintile have completed a university degree; in contrast, less than 2 percent in the poorest quintile are university graduates. In fact, more than a quarter of those in the poorest quintile had not even completed primary school by 2010.

The impacts of demographic factors on poverty have changed since the late 1990s. Child poverty continues to be a concern, although less so than in the 1990s, when poor rural households had many children and struggled to feed and educate them. As a result of family planning policies initiated in the early 1990s, most households now have only one or two children, and many of the adult children from the erstwhile large families in the 1990s are helping to support their parents and siblings. Aging is a new demographic risk; Vietnam's population is aging and our analysis suggests that the elderly, particularly those who live alone, may be increasingly at risk of future poverty. Although targeting is good, existing poverty and social protection programs provide only partial coverage and limited benefits to poor and at-risk individuals. In 2010, only half of the extreme poor reported that they were eligible to receive benefits from the Ministry of Labor, War Invalids, and Social Affairs (MOLISA) poverty reduction programs.

## Emerging Challenges: Changing Spatial Patterns of Poverty and Rising Inequality

New poverty maps were developed based on the 2009 Housing and Population Census and the 2010 VHLSS. The maps show that poverty is becoming more concentrated in upland regions of Vietnam, including the North East and North West Mountains and parts of the Central Highlands. (Figure 2) In contrast, complementary household “wealth” maps<sup>2</sup> indicate that better off households are primarily concentrated in the Red River Delta (near Hanoi) and Southeast (near Ho Chi Minh City) and in urban centers along the coast. Although poverty rates are low in urban areas, lower income residents struggle to cope with the rising cost of living (including increases in electricity and water tariffs and rising fuel prices), and many work in the informal sector without social protection or employment benefits. Urban poverty is most prevalent in Vietnam’s small cities and towns, which lag behind Vietnam’s larger cities in terms of basic infrastructure and public services.

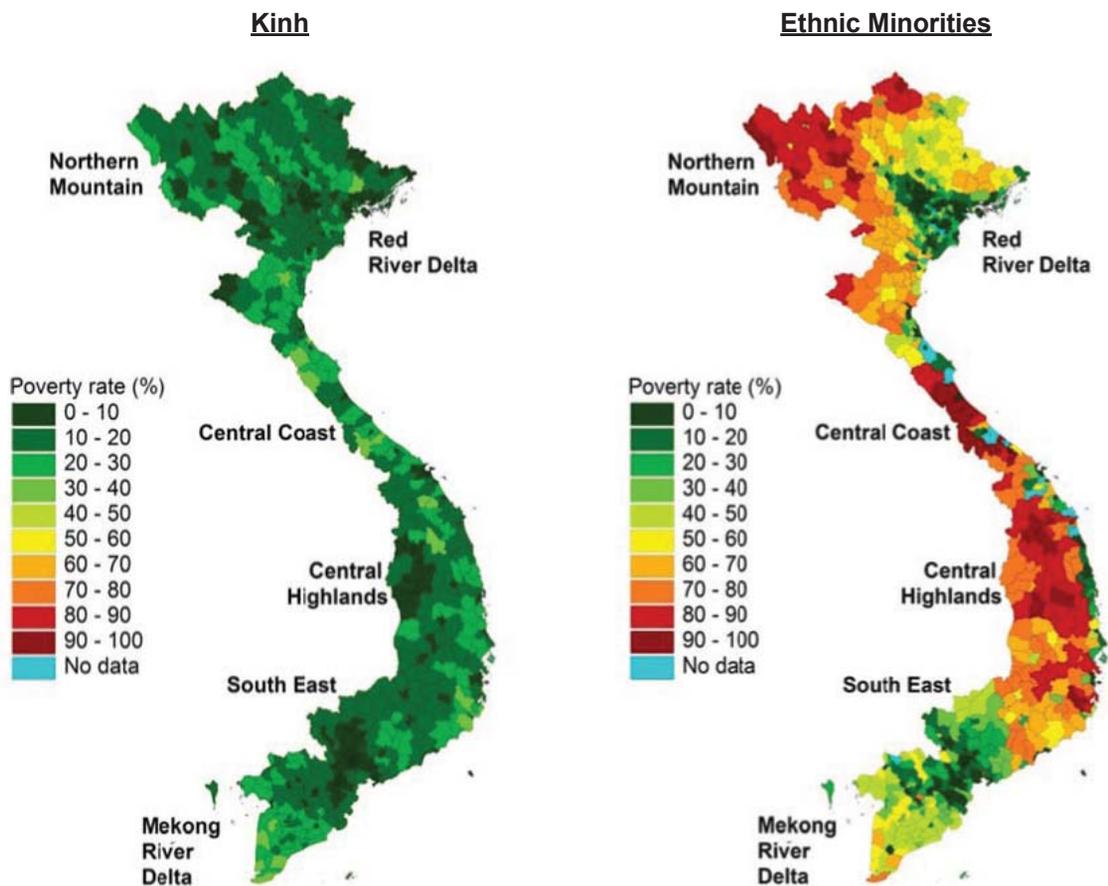
Figure 2: Poverty Rates (percent poor) in 1999 and 2009



Ethnic minorities make up 15 percent of the population in Vietnam and nearly half the remaining poor. New poverty maps show that minorities are concentrated in upland regions, with less infrastructure and much poorer connectivity. However location is not the only factor that explains the large gap in living conditions between ethnic minorities and the Kinh: according to Figure 3, even in the same (upland) districts, ethnic minority poverty is substantially higher (by a factor of 4-6 times) than poverty among the Kinh population. The persistent gap contributes to very high levels of inequality in poor regions with substantial minority populations.

<sup>4</sup> Individuals in the wealthiest 15 percent of the population

Figure 3: Poverty Rates (percent poor) by Ethnicity in 2009



The Poverty Assessment looks at inequality through two lenses—the first based on empirical analysis of various rounds of the VHLSS and the second drawing on findings from a new qualitative field study of “perceptions of inequality” that was carried out in sites throughout Vietnam. The perceptions study draws on a number of rich focus group discussions that describe which inequalities are viewed as unacceptable in the eyes of Vietnamese people, and also captures less easily measured inequalities, such as inequalities in connections, voice, and influence. It documents widespread concerns across the population about rising inequality. The quantitative analysis examines the factors driving the rise in inequality, including geographic variations in growth processes, growth in the non-agricultural sector, and disparities in education and ethnic identity. The rise in income inequality is in part a reflection of growth processes that have altered the relative returns to assets, such as education and productive capital in the economy. Growth has interacted with existing inequalities in opportunities—inequalities in education, access to good jobs, patterns of social exclusion, geographic disparities—to increase income inequality and welfare gaps between rich and poor households. The persistent and rising gap between the welfare of ethnic minorities and Kinh majorities also contributes to rising inequality.

This study identifies many new avenues for future research. For example, more work is needed to better understand old and new sources of vulnerability, including urbanization and changing patterns of employment, and new research is needed on aging and health shocks. In addition, a more in-depth analysis of Vietnam’s targeted poverty reduction policies and programs is needed, with particular focus on policies designed to reduce poverty among ethnic minorities, where challenges clearly remain. Although Vietnam has successfully eradicated extreme poverty and hunger in all but a few isolated areas, there are widespread concerns about rising inequality in opportunities and outcomes. New work is needed to better understand these various sources of inequality and, more importantly, to understand what is the appropriate role of public policy in addressing these challenges.

## Emerging Policy and Program Implications

The Poverty Assessment focuses primarily on poverty and inequality diagnostics, and as such aims to support a better informed debate on policy and program responses among stakeholders in Vietnam, including government ministries, the National Assembly, local researchers and research institutes, INGOs and NGOs, international partners and the wider research community. Building on these diagnostics, work is underway with the Vietnam Academy of Social Sciences and other stakeholders in Vietnam to develop a more comprehensive policy framework for poverty reduction.

The emerging framework has four areas of policy focus:

- First, it is essential for Vietnam to reduce volatility and macro instability, and undertake the complementary structural reforms—restructuring of the state owned enterprises, reforming the financial sector, raising the effectiveness of public investments and moving to a more transparent and open development process—necessary to put Vietnam back on the path of high and sustained economic growth. But the quality of growth matters as much of the rate of growth.
- Second, measures are needed to make Vietnam’s future economic growth more inclusive, for example by supporting productivity and growth in the rural sector through improving connectivity, strengthening skills, improving the investment climate, expanding access to basic services, also better targeting agriculture support measures (e.g. credit, agriculture extension, and market information) to the needs of poor and ethnic minority farmers. Support for labor intensive industries and SMEs in both formal and informal sectors will also contribute to inclusive growth, including better access to credit and training, expanded vocational training for youth in poor and ethnic minority areas, and incentives for local enterprise development to provide more diversified employment options in local communities. The occupational and geographic mobility of labor should be enhanced: migration of rural workers into Vietnam’s rapidly growing cities has been a powerful force for growth and poverty reduction in the past. It is also important to reduce inequality of opportunities, including improving the quality of education and promoting skills development, particularly in rural areas and for ethnic minority groups. Improving governance through greater transparency and accountability will help to increase local participation and reduce inequalities in voice and power that work to undermine inclusive growth.
- Third, policies to promote growth must be complemented by effective social insurance and social assistance policies. Vietnam should protect social spending and social assistance in the process of economic restructuring. Social benefits and the official poverty lines used to target these benefits should be inflation-indexed, also adjusted to capture differences in the spatial cost of living, including between rural and urban areas, and to properly take into account basket of goods and services specific to the poor. Better measures are needed to protect poor and vulnerable households from the rising cost of basic services, particularly rising electricity costs in the context of the planned energy subsidy phase-out. Migrant workers have been hard hit by the rising cost of living in urban areas; they should have equal access to basic services, portable benefits (including health insurance), and better access to social protection programs in their new place of residence.
- Finally, continuing improvements are needed in Vietnam’s poverty monitoring system so that it provides a reliable source of information for policy making in a rapidly changing economy. To this effect, objective resource-independent poverty lines should be used in parallel with resource-linked targeting lines, and the source and appropriate application of the two types of poverty lines should be communicated clearly to policy makers, practitioners, and the public. The construction of future poverty profiles and poverty estimates should be done in an open and transparent way: more data on poverty, inequality, and social programs should be made publically available to facilitate monitoring of progress by independent experts and the public at large.

# Chapter 1

## **Vietnam's Growth and Poverty Reduction Record: Remarkable Success, but Big Remaining Challenges**

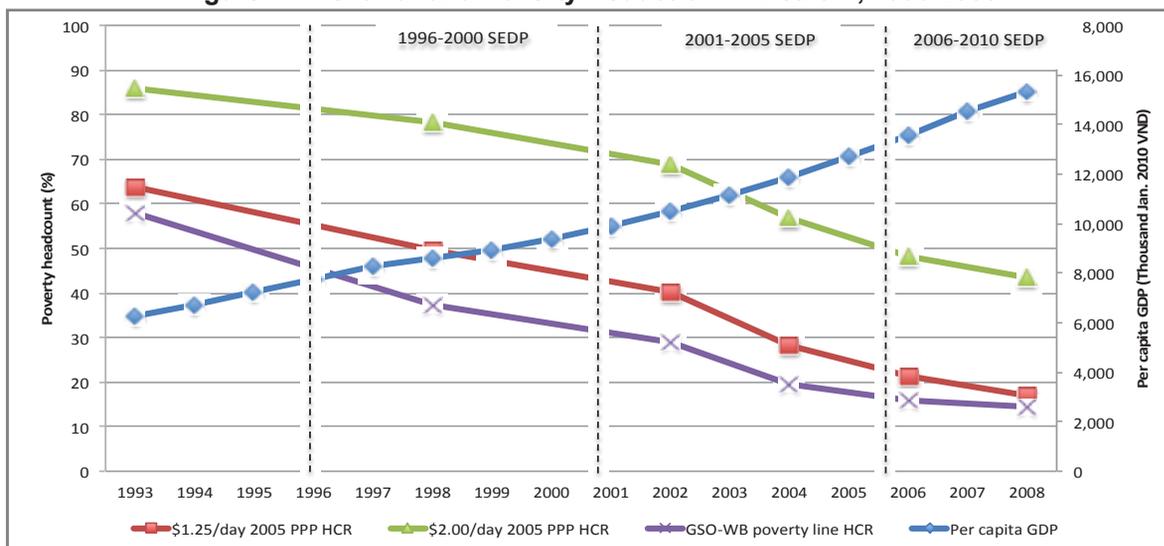
*Vietnam has made remarkable progress at reducing poverty and promoting prosperity over the last two decades. But the task of poverty reduction is not yet finished: shared growth, ethnic minority poverty, increasing vulnerability, and rising inequality are the major poverty challenges going forward.*

## A. Introduction

1.1 Vietnam has experienced high and sustained rates of economic growth over the last two decades, driven by a series of market-oriented reforms launched in the late 1980s. Initial progress was led by reforms in the rural economy, which led to a highly egalitarian distribution of agricultural land to rural households and diversification in on-farm activities, reforms that provided the right incentives for increases in farm production and export orientation. In recent years, job creation in the private sector has become a driving force behind Vietnam's high economic growth, complemented by increased integration of agriculture in the market economy, and further opening of the Vietnamese economy to global trade and investment. Vietnam's accession to the World Trade Organization (WTO) in early 2007 created opportunities for a new round of reforms, potentially leading to substantial changes in the policy and business environment, with major implications for economic growth and poverty reduction. But these opportunities are accompanied by new challenges and risks; growth has slowed in recent years, and Vietnam has struggled with periods of macro instability and bouts of high inflation.

1.2 Vietnam's historical growth patterns have been remarkably pro-poor; growth in per capita gross domestic product (GDP) averaged 6.1 percent a year between 1993 and 2008, and poverty fell by an average of 2.9 percentage points a year (figure 1.1).

**Figure 1.1 Growth and Poverty Reduction in Vietnam, 1993-2008**



Source: WB-GSO poverty headcount calculated using 1993 and 1998 VLSS and 2004–2010 VHLSS. Dollar-a-day rates come from Povcalnet. Per capita GDP calculated using GSO population and GDP data.

Note: HCR = Headcount Rate of Poverty, that is, incidence of poverty.

1.3 Despite remarkable progress, Vietnam's task of poverty reduction is not complete, and in important respects, it has become more difficult. This chapter takes stock of Vietnam's past record at reducing poverty and improving living conditions—acknowledging remarkable progress judged by any standards—and highlights several remaining and new challenges. It argues that the task of poverty reduction is by no means complete, and that it will become more difficult with growing affluence and rising aspirations, as Vietnamese society becomes more heterogeneous, market-oriented reforms continue, and Vietnam becomes more integrated into the global economy.

## B. Vietnam's economy has grown rapidly and has undergone profound structural transformation

1.4 Comprehensive economic reforms were launched in the second half of the 1980s under Doi Moi and have accelerated over the last two decades. As a result of the reform process, the economy has been liberalized both internally and externally. The passage of the revised Land Law in 1993 and

the introduction of the Enterprise Law in 2000 were among the most important milestones in terms of domestic reforms. The accession of Vietnam to the WTO is widely recognized as a key milestone in the country's external liberalization. Vietnam announced an ambitious plan to restructure the economy and shift into a new growth model in 2011, which is a new and important step in the country's ongoing transition toward a market economy.

1.5 The Land Law of 1993 marked the continuation of a program of agricultural reforms that were initiated in 1988 with the implementation of Resolution 10. Resolution 10 radically changed the incentive system in the rural sector by recognizing, for the first time, that the household was the basic production unit of Vietnam's agrarian economy and granted it the needed autonomy. With the aim of consolidating these changes, the 1993 Land Law granted households five basic rights: to transfer, exchange, inherit, rent, and mortgage their land. The law also extended the lease term to 20 years for annual cropland and 50 years for perennial cropland. The implementation of this law resulted in an extensive land titling program in Vietnam. In terms of scale and speed of implementation, it was one of the largest rural titling programs in the developing world (Iyer and Do 2008). Resolution 10 and the Land Law of 1993 together played a crucial role in boosting agricultural growth in the 1990s, thus enabling Vietnam to move from a food deficit country in the 1980s to one of the world's largest rice exporters by the end of the 2000s.

1.6 A series of additional policy reforms outside the agricultural sector helped lay the foundation for rapid development of the private sector, whose role was officially recognized by Vietnam's 1992 constitution. The most important milestone in the process was the Enterprise Law of January 2000. It represented a radical change in approach compared to the preceding Private Enterprise Law and Company Law, both of which were approved in 1990. Private enterprises were allowed to operate prior to 2000, but were subjected to a series of government approvals and controls. With the introduction of the new Enterprise Law, citizens were allowed to establish and operate private businesses with limited intervention from government officials. The most important innovation introduced by the Enterprise Law was the simplification of registration procedures and the associated elimination of a large number of business licenses, which sharply reduced transaction costs for businesses and helped install greater business confidence. As a result of these reforms, the number of registered enterprises increased by almost 15 times within only 10 years, from 31,000 in 2000 to 460,000 in 2009, according to the Ministry of Planning and Investment.

1.7 External liberalization has been accelerated at all levels—unilateral, bilateral, regional, and multilateral—over the last two decades. Beginning in the late 1980s, tariffs were unilaterally reduced, and numerous quantitative restrictions on trade abolished. Subsequently, Vietnam actively participated in bilateral and regional trade agreements. Membership in the Association of Southeast Asian Nations (ASEAN) in 1995 and its associated Asian Free Trade Area, and the U.S.-Vietnam Bilateral Trade Agreement in 2001, were important steps in the integration process. After 2003, Vietnam accelerated its negotiations for WTO membership and officially acceded to the WTO in January 2007. Becoming a WTO member has had important implications for Vietnam's development, because of major changes taking place at the border (a reduction in import tariffs and removal of nontariff barriers to trade), beyond the border (greater access to overseas markets and to the WTO's dispute settlement mechanism), and behind the border (opening of service sectors and distribution systems, changes in legal and regulatory frameworks, and so forth). Implementation of these agreements not only helped promote exports and restructuring in the domestic economy, but became key drivers for reform of key institutional underpinnings of a market economy, including legal and judicial structures. The Common Investment Law of 2005, for example, helped to harmonize treatment and regulation of all types of businesses including domestic firms, foreign firms, and cooperatives.

1.8 Two decades of reform have helped to sustain high growth in the economy and transform Vietnam in the process. Even with the marked slowdown in economic activity in the last few years in part caused by the international financial crisis, itself a reflection of Vietnam's growing integration with the rest of the world, the Vietnamese economy has grown at an annual rate of more than 8 percent over the last decade. Today, the Vietnamese economy is four times larger than it was in the early 1990s, and the country now falls into the ranks of lower-middle-income countries. In 2010, per capita gross national income was more than US\$3,000 (purchasing power parity [PPP]).

1.9 This growth has been accompanied by pronounced structural changes at the aggregate level. Twenty years ago, Vietnam was primarily rural, with nearly 80 percent of the population living in the countryside and only 20 percent residing in cities and towns. Moreover, the urban sector was dominated by two major economic and political hubs, Hanoi in the north, and Ho Chi Minh City in the south. In terms of GDP, slightly more than 40 percent of the economy was generated by agriculture, followed by services and then industry. Growth in the agricultural sector (cropping and farm sidelines) has played an important role in Vietnam's development success. Nonetheless, its share of GDP has fallen to half of what it was in the early 1990s, and in 2010 contributed 20 percent of GDP. Industry, which includes manufacturing, construction, and utilities, has been the most rapidly growing and dynamic sector and currently makes up 38 percent of GDP. Services contribute 42 percent, modestly higher than the level in 1992.

1.10 These changes in the structure of the economy are largely mirrored in the composition of employment in Vietnam. In 1992, three-quarters of the labor force identified agriculture as their primary source of employment, with only 10 and 15 percent, respectively, in industry and services. Rapid productivity growth in the farm sector has contributed to rising incomes in the countryside; equally important, it has enabled the reallocation of a growing share of labor into even higher-value activities in industry and services. Today, the share of the labor force working in agriculture has fallen below 50 percent, while the share in both industry and services has doubled.

1.11 Accompanying this shift in the composition of employment has been a change in its type, most notably a reduction outside of agriculture in the role of self-employment (largely small, family-run businesses) relative to wage employment. The role of the state in wage employment has also fallen. Overall, however, the state actually employs a slightly larger percentage (upwards of 20 percent) of the labor force than it did in the early 1990s, reflecting the growth in wage employment in the state-owned enterprises sector. Urbanization, aided by increasing migration from the countryside, has also increased, but according to Vietnam's 2009 census, only 30 percent of the population was classified as urban at that time. This puts urbanization in Vietnam at levels observed elsewhere in Southeast Asia about a decade ago.<sup>1</sup>

1.12 Thanks to external liberalization, Vietnam's foreign trade has grown at more than twice the rate of GDP growth, and in 2010 the foreign trade ratio (imports plus exports as a percentage of GDP) was an unprecedented 165 percent. By comparison, and at its peak in China in 2006, it was only 70 percent. The composition of exports has slowly shifted. Exports of oil and agricultural products continue to remain important, but labor-intensive light manufacturing goods now represent the fastest-growing component of exports. Imports of capital machinery and intermediate goods dominate on the other side of the ledger. Export growth has been aided by the run-up in foreign direct investment in Vietnam, which rose from only US\$0.5 billion in 1992 to around US\$11.0 billion by 2010, with much of this occurring after WTO entry. Rapidly rising wages in China make Vietnam very appealing. Currently, foreign-invested firms are the source of half of Vietnam's nonoil exports. In terms of employment, however, these firms still employ less than 2 percent of the labor force.

1.13 In addition to productivity growth, rising rates of investment in the domestic economy have been an important source of growth. This works through two channels—on the demand side, as an important source of growth in expenditure, and on the supply side, through investment's role in expanding the country's productive capacities and introducing new technology and know-how into the economy. Between 1992 and 2010, gross capital formation rose from only 17.6 percent of GDP to 38.9 percent, comparable to levels observed in the Republic of Korea; Japan; and Taiwan, China at their peaks. In 2010, the World Bank put domestic savings at 33.2 percent of gross national income. With the government sector typically running fiscal deficits and state-run firms net borrowers, the huge increase in savings is coming from a more than doubling in the savings rates of households and private enterprise.

1.14 Finally, reform and rising incomes have had a profound impact on household demographic behavior and population growth. In the early 1990s, average fertility rates of 3.4 births per woman

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<sup>1</sup> These numbers may underestimate the reduction of the share of employment in agriculture because of the growth in the countryside of secondary jobs in industry and services. In absolute terms, labor supply to agriculture is likely smaller today than it was when the reforms began.

translated into population rates of growth of nearly 2 percent per year. By 2010, fertility had fallen to 1.8, below replacement levels, and population growth to only 1 percent. Over the same period, average household size declined by nearly one person, from 5 to 4. With the sharp drop in fertility, the percentage of the population of working age has increased, pushing labor force participation rates upward from 50 to 60 percent of the entire population. Vietnam's falling dependency ratio, that is, the ratio of those not working to those in the labor force, has had a direct impact on per capita incomes, and indirectly affected incomes through rising savings rates and investment and the "demographic dividend."

### C. Progress in reducing poverty has been remarkable by any standard

1.15 Vietnam's dramatic decline in poverty is evident across a number of different approaches used to monitor progress, whether assessed in terms of national poverty lines or using internationally comparable lines, or using household surveys or bottom-up community-based methods (box 1.1). The absolute number of poor people living in Vietnam has dropped sharply, and reductions in the poverty headcount have been accompanied by notable reductions in the depth and severity of poverty. However, progress has been uneven across regions and ethnic groups and has started to slow.

#### **Box 1.1 How does Vietnam Monitor Progress at Reducing Poverty?**

Vietnam has used two very different approaches to measure poverty and monitor progress. Both were initiated in the early 1990s and both have evolved over time.

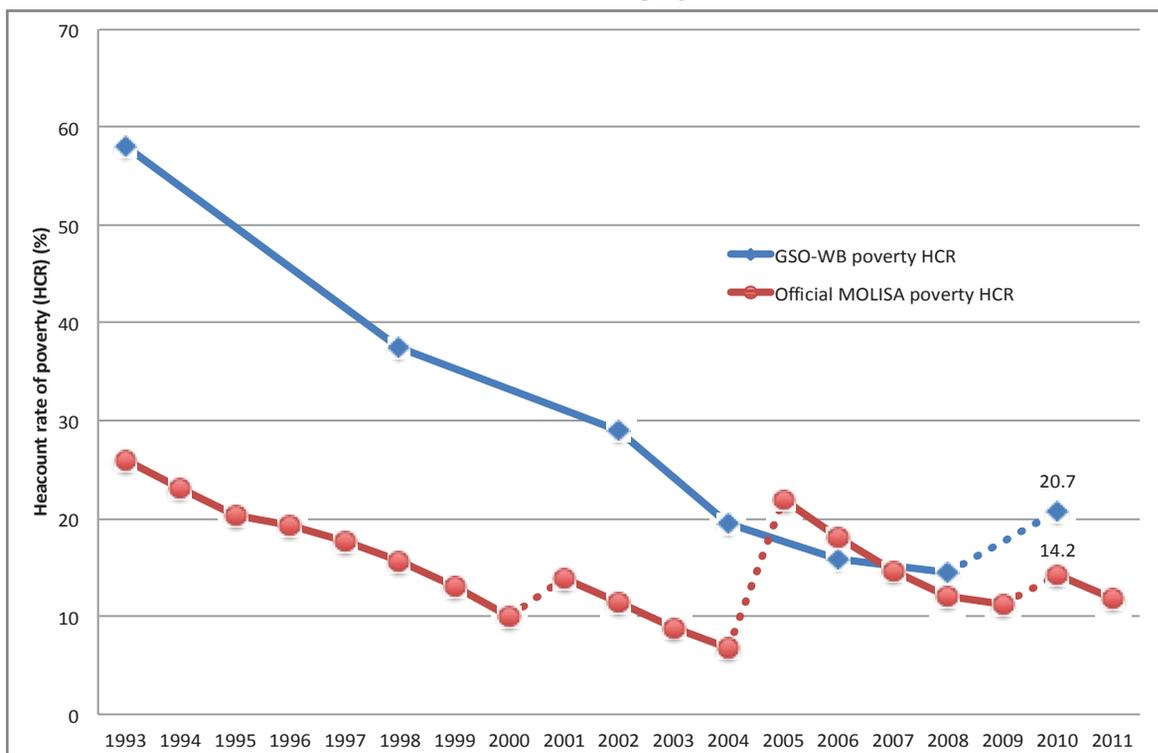
The first approach was developed and led by the Ministry of Labor, Invalids, and Social Affairs (MOLISA), identified in the early 1990s as the primary government agency responsible for poverty reduction programs and policies. MOLISA is tasked with proposing official urban and rural poverty lines at the beginning of each five-year Socio-Economic Development Plan (SEDP) and setting the beginning period poverty rate. Using the official lines and the beginning period poverty rate, MOLISA is responsible for assessing changes in poverty and updating its list of poor households on an annual basis, using a "bottom-up" mix of local surveys and village-level consultations to count the number of poor at local (commune) levels, which are then aggregated up to calculate provincial and national poverty rates. Progress is assessed against poverty reduction targets set in the SEDP. The MOLISA lines were initially based on rice equivalents but since 2005 have been calculated (with technical support from General Statistics Office[GSO]) using a Cost-of-Basic-Needs (CBN) methodology similar to the second approach (see below) led by GSO. The official lines are not adjusted for inflation, but are revised in real terms only every five years. MOLISA's primary objective using this approach is to determine budget allocations and define eligibility for a number of targeted poverty reduction programs (for example, the National Targeted Program for Poverty Reduction, and Program 30a).

The second approach is led by the GSO and measures poverty and monitors progress on the basis of nationally representative household surveys. GSO uses two different methods to measure poverty—one based on official poverty lines (adjusted for inflation) applied to per capita incomes, and one using an approach developed by a joint GSO and World Bank team in the late 1990s and first presented in the 2000 Poverty Assessment. The GSO-WB poverty line is constructed using a standard CBN methodology, based on a reference food basket for poor households anchored in caloric norms (through 2008, 2,100 kilocalories per person per day) plus an additional allocation for essential nonfood needs based on consumption patterns of the poor. Unlike Vietnam's official poverty lines, the GSO-WB lines have been kept roughly constant in real purchasing power since the late 1990s, and applied to per capita consumer expenditures measured in successive rounds of the Vietnam Living Standards Survey (VHLSS) to estimate changes in poverty over time at the national, urban/rural, and regional level. The GSO-WB lines have been used widely in Vietnam and in international discussions to monitor changes in poverty since 1993. We use these poverty rates in figure 1.1.

## The share of the population living below Vietnam’s national poverty lines has declined dramatically

1.16 Figure 1.2 shows historical poverty trends based on General Statistics Office/World Bank (GSO-WB) estimates and official poverty lines and methods. The continuing use of the two separate systems for measuring and monitoring poverty, producing widely different poverty estimates, has at times complicated the dialogue between the development community and local researchers (who typically use the GSO estimates) and the government (which has tended to use the official MOLISA estimates). Although the different estimates sometimes caused confusion, the ongoing development and insistence on rigorous approaches to measurement has contributed to a better conceptualization of poverty on the part of government and the policy research community in Vietnam. Moreover the higher poverty rates produced by the GSO methodology, particularly in the 1990s, helped to keep poverty high on the government’s agenda.

**Figure 1.2 Progress at Reducing Poverty using GSO-WB and MOLISA Monitoring Systems**



Sources: WB-GSO poverty headcount calculated using 1993 and 1998 VLSS and 2004–2010 VHLSS. MOLISA estimates based on UNDP 2004; Government of Vietnam 2005; MOLISA 2011; and 2011 Vietnam Statistical Yearbook.

1.17 Over time, as the poverty rate fell (narrowing the gap between MOLISA and GSO estimates) and as the poverty estimates produced through the Vietnam Household Living Standards Survey (VHLSS) became increasingly recognized as valid and robust, MOLISA’s poverty estimates have become more aligned with those produced by the GSO. As part of the workup to the 2011–2016 Socio-Economic Development Plan (SEDP), the government agreed formally in Prime Minister’s (PM’s) Decision 60/2010<sup>2</sup> to separate the two important tasks of (a) targeting poor households for social assistance, on the one hand; and (b) measuring and monitoring poverty over time on the other. The aim is to build on the strengths of both systems. As part of this agreement, the GSO was given formal responsibility for producing national and provincial poverty estimates, based on successive rounds of the nationally representative VHLSS. MOLISA would concentrate on the task of identifying which individual households within provinces, districts, and communes should be included on the

2 PM Decision 60/2010 “On the Issuance of Principles, Criteria, and Norms for the Allocation of Development Investment Funding in the State Budget 2011–2015.”

MOLISA poverty list, with a ceiling defined by the provincial poverty rates proposed by the GSO in consultation with MOLISA. The intention over the longer term is to align MOLISA and GSO's poverty estimates at the national and provincial levels, with the aggregate number of households on the poverty list determined by GSO's VHLSS-based measures of poverty based on official poverty lines.

1.18 As part of this new arrangement, GSO and MOLISA worked together to develop a common methodology for producing the national and provincial poverty estimates, including the construction of new official urban and rural poverty lines to be used for the period of the 2011–2015 SEDP. The team developed three options for the new official lines, reflecting different requirements and living standards. The higher options included higher allocations for essential nonfood spending, based on consumption patterns of low-income households in the VHLSS. Following intensive discussion, the government chose the lowest of the three options. While the higher option was preferable on strictly methodological grounds, the government operates under a constrained budget and could not extend benefits under the National Target Program for Sustainable Poverty Reduction (NTP-SPR) and other targeted programs to the anticipated large increase in eligible households—the higher-option poverty lines implied national poverty rates of 18 to 20 percent of the population. Given the inevitable tension between resource availability and needs, the MOLISA lines are often referred to as “budgeting” or “planning” lines, and the process of agreeing on official poverty levels at the start of an SEDP, and annual targets for poverty reduction over the course of SEDP implementation, involve a range of technical, financial, and political considerations. As described in chapter 2, other countries face similar challenges.

1.19 In September 2010, Vietnam announced a new official poverty rate of 14.2 percent (figure 1.2). The official poverty line for urban areas was raised from VND260,000 per person per month (US\$1.34 person per day, 2005 PPP) to VND500,000 per person per month (US\$1.61 per person per day, 2005 PPP). The official line for rural areas was raised from VND200,000 per person per month (US\$1.03 per person per day, 2005 PPP) to VND400,000 per person per month (US\$1.29 per person per day, 2005 PPP). A second and higher set of official “near-poor” lines was also approved, allowing the government greater leeway in expanding eligibility criteria when deemed desirable, such as for determining eligibility for health insurance subsidies. The near-poor lines are 30 percent higher than the official poverty lines—VND650,000 per person per month (US\$2.24 per person per day, 2005 PPP) for households living in urban areas and VND520,000 per person per month (US\$1.83 per person per day, 2005 PPP) for rural households—and similar in value (and implied national poverty rate) to the higher of the three poverty line options initially proposed.

1.20 The government set ambitious targets for poverty reduction in the 2011–2015 SEDP; poverty at the national level is targeted to fall by 2 percentage points each year between 2011 and 2015, and by 4 percentage points in the poorest communities, including those with high proportions of ethnic minority households. Achieving these targets will require a substantially higher rate of progress than achieved under the previous SEDP, and may be particularly challenging given the slowdown in economic growth and in the absence of substantially higher spending to support pro-poor policies and spending. Progress is monitored closely down to the commune level, and there are strong incentives for local authorities to meet these targets.<sup>3</sup>

1.21 New poverty estimates for 2011 were released by GSO in Vietnam's 2011 Statistical Yearbook based on a new household survey (2011 VHLSS) covering nearly 47,000 households. Poverty in 2011 is estimated to have been reduced to 12.6 percent—a 1.6 percentage point reduction between 2010 and 2011. MOLISA released its own set of 2011 poverty estimates on March 28, 2012<sup>4</sup>. According to these figures, poverty is estimated to have been reduced to 11.8 percent—a 2.4 percentage point reduction between 2010 and 2011. According to MOLISA's Decision 375, poverty fell most rapidly in Vietnam's high-poverty regions—the West Northern Mountains (6.4 percentage points), the North Central Coast (5.7 percentage points), the Central Highlands (3.6 percentage points), and the East

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3 Detailed work, including field studies carried out as part of the Poverty Assessment, indicate considerable variation in how resources for poverty reduction are used at the local level. There are incentives to show progress, and in some cases these incentives may cause officials to focus resources on households just below the poverty line (because progress is judged in terms of crossing the poverty line) rather than chronic or extreme poor.

4 MOLISA Decision 375/QĐ-LĐTBXH issued on March 28, 2012.

Northern Mountains (3.2 percentage points). Poverty was estimated to fall by only 1.2 percentage points in the Mekong Delta, well below targets set in the SEDP. In response to a new resolution on social protection (Resolution 15) approved by the Central Party Committee in late 2012, MOLISA is developing new average and minimum living standards cut-offs that will provide a more scientific basis for benefit levels linked to future (new) social assistance programs. The methodology used to calculate minimum living standards is similar to that used to calculate the 2010 GSO/WB poverty line.

1.22 For the present, given the differences in 2011 poverty estimates, and pending stronger implementation of agreements reached in PM Decision 60/2010, there is a strong rationale for continuing to use both the MOLISA approach (for targeting) and the GSO approach (for independent monitoring). We return to this issue in Chapter 2.

1.23 As part of the background work for this report, the team worked closely with the GSO to update the GSO-WB poverty line and related methodologies for poverty monitoring, to ensure that Vietnam's methods for monitoring poverty fully reflect current economic and social conditions. The updated GSO-WB poverty line is VND653,000 per person per month (US\$2.24 per person per day, 2005 PPP), which yields a poverty rate of 20.7 percent in 2010 (figure 1.2, blue triangle for 2010). Chapter 2 describes proposed changes to the GSO-WB approach including improvements to the VHLSS, updated welfare aggregates, and construction of a revised 2010 GSO-WB poverty line. Note that poverty estimates using the new 2010 methodology are not strictly comparable to poverty estimates from recent rounds of the VHLSS for reasons presented in Chapter 2 and are explicitly set apart in the tables and figures in the remainder of this chapter.

### The fraction of the population living below the international standards of US\$1.25 and US\$2.00 has also declined

1.24 Vietnam's own poverty line(s) are clearly better for assessing progress and identifying remaining challenges within the country than international poverty lines. However, PPP-adjusted international poverty lines are often used to compare progress across countries. Vietnam's progress at poverty reduction is equally impressive judged by international standards of US\$1.25 and US\$2.00 per person per day (2005 PPP). The poverty headcount fell from 63.7 percent using US\$1.25 (2005 PPP) in 1993 to 16.7 percent by 2008, and from 85.7 percent using US\$2.00 (2005 PPP) in 1993 to 43.3 percent by 2008, the last year for which comparable poverty rates were published by the World Bank (Table 1.2). Thus, poverty fell by an estimated 3 percentage points per year between 1993 and 2008, albeit with faster progress in the 1990s and first half of the 2000s than in recent years.

### In total, nearly half Vietnam's population was lifted out of poverty in less than two decades

1.25 Measured by temporally comparable GSO-WB standards, more than 43 million people were lifted out of poverty between 1993 and 2008. A remarkable reduction in the number of poor men, women, and children living in Vietnam is also confirmed using PPP-adjusted international poverty lines.

**Table 1.1 Two Decades of Progress in Reducing the Number of Poor People**

Poverty standard	Number of poor (millions)			Change (millions)			(% pts)
	1993	1998	2008	1993- 1998	1998- 2008	1993- 2008	2008, Annual
Official GSO-WB poverty line: consumption	39.8	28.2	12.3	-11.5	-15.9	-27.4	-2.9
\$1.25/day (2005 PPP): consumption	43.6	37.5	14.3	-6.2	-23.1	-29.3	-3.1
\$2.00/day (2005 PPP): consumption	58.7	59.0	36.9	0.4	-22.1	-21.8	-2.8

Sources: VASS 2010 for 1993–2008 GSO-WB headcount estimates; POVCALNET for 1993–2008 US\$1.25 and US\$2.00 headcount estimates. Population statistics taken from POVCALNET except for 2010, which come from World Bank Data on Vietnam web page, <http://data.worldbank.org/country/vietnam>.

## The depth and severity of poverty have also fallen sharply

1.26 The poverty headcount is a widely understood and widely reported measure of poverty. However, it ignores the fact that all poor people are not the same; some have incomes or consumption levels very close to the poverty line, while others live in much poorer conditions, well below standards reflected in the poverty line. Two additional indicators are used to measure the depth and severity of poverty. The poverty gap (depth) measures the average, across all people, of the gap between the living standards of the poor and the poverty line. The squared poverty gap (severity) is calculated using a similar methodology, but gives greater weight to households whose living standards are further away from the poverty line.

1.27 According to table 1.2, Vietnam has made steady progress in reducing the depth and severity of poverty, whether measured by national or international standards. Living conditions not only have improved for households living near the poverty line, but also for many of Vietnam's poorest households.

**Table 1.2 Progress at Reducing Incidence, Depth and Severity of Poverty in Vietnam**

	GSO-WB poverty line			\$1.25/day 2005 PPP line			\$2.00/day 2005 PPP line		
	Incidence (Headcount rate, %)	Depth (Poverty Gap, %)	Severity (Squared Poverty Gap, %)	Incidence (Headcount rate, %)	Depth (Poverty Gap, %)	Severity (Squared Poverty Gap, %)	Incidence (Headcount rate, %)	Depth (Poverty Gap, %)	Severity (Squared Poverty Gap, %)
1993	58.1	18.5	7.9	63.7	23.6	11.0	85.7	43.5	25.7
1998	37.4	9.5	3.6	49.7	15.1	6.0	78.2	34.2	18.0
2002	28.9	7.0	2.4	40.1	11.2	4.1	68.7	28.0	14.1
2004	19.5	4.7	1.7	28.3	7.2	2.5	56.9	20.8	9.8
2006	15.9	3.8	1.4	21.4	5.3	1.9	48.0	16.3	7.3
2008	14.5	3.5	1.2	16.9	3.8	1.2	43.3	13.5	5.6
2010	20.7	5.9	2.4	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.

Sources: VASS, 2010 for 1993–2008 GSO-WB headcount estimates; POVCALNET for 1993–2008 US\$1.25 and US\$2.00 headcount estimates; Statistics for 2010 calculated by the World Bank using the comprehensive consumption aggregate.

Note: Poverty estimates using international poverty lines have not been published yet by the World Bank for Vietnam in 2010.

## But the rate of poverty reduction is slowing, linked to rising macro instability and slower growth

1.28 High and sustained rates of economic growth have been a key factor in Vietnam's success at reducing poverty. But the economy has slowed in recent years. Beginning in late 2007, Vietnam has struggled with economic turbulence and inflation, with sharp and persistent increases in the prices of many basic commodities. Many workers lost jobs; others received lower wages and reduced working hours due to reduced demand during the global economic crisis in late 2008 and early 2009. Farmers complain that the costs of agricultural inputs are rising, and profit margins are reduced. There were again rising food prices and a sharp increase in the costs of electricity and fuel in 2010, which put additional pressure on household budgets. Households in urban and peri-urban areas have been particularly hard hit by high inflation, including rural-to-urban migrants who come to the city in ever growing numbers to seek better jobs and higher pay. Migrants send money home to rural areas; the impacts of higher urban prices are thus also passed on to households living in rural areas through declining remittances (see, for example VASS 2011). Urbanization is increasing at a rapid pace and the face of poverty and sources of vulnerability in urban areas differ in important respects from more traditional poverty concerns in rural areas.

## Vietnam has also achieved dramatic progress in improving the non-income dimensions of poverty and has met or is likely to meet most of the Millennium Development Goals (MDGs)

1.29 Table 1.3 documents progress along other dimensions of well-being. Vietnamese today are much better educated and arguably better prepared to get jobs in industry or services. In 1998, 25 percent of

persons aged 15 to 24 did not complete primary school. By 2010, only 12 years later, the percentage had fallen to only 4 percent, and upper secondary enrolments had nearly doubled (60 percent for girls, 54 percent for boys). Moreover, by 2010, there were more girls enrolled in both levels of secondary school than boys; Vietnam scores remarkably well in terms of gender parity in education.

**Table 1.3 Improvements in Non-income Dimensions of Poverty, 1993-2010**

	1993	1998	2010
<b>Education</b>			
% of 15-or-older who have not completed primary school	35.5	35.7	14.4
% of 15-24 who have not completed primary school	23.3	25.4	4.1
Primary enrollment rate (net)			
Female	87.1	90.7	92.8
Male	86.3	92.1	92.5
Lower secondary enrollment rate (net)			
Female	29.0	62.1	83.2
Male	31.2	61.3	80.2
Upper secondary enrollment rate (net)			
Female	6.1	27.4	60.1
Male	8.4	30.0	53.9
<b>Health</b>			
Immunization, DPT1, % of children ages 12-23 months	91	94	93
Immunization, measles, % of children ages 12-23 months	93	96	84
Infant mortality (per 1,000 live births)	34	29	14
Incidence of stunting (low height for age), children under 5	51	34	23
Incidence of underweight (low weight for age), children under 5	37	36	12
Life expectancy at birth (years)	68.1	71.0	74.8
% of poor with health insurance	n/a	7.8	71.6
<b>Access to infrastructure and durables</b>			
% using electricity as main source of lighting	48	77	98
% with access to an improved* water source			
Rural	76	70	87
Urban	89	89	98
% with access to clean** water			
Rural	17	29	57
Urban	60	75	89
% with sanitary latrine	19	26	69
Rural	10	14	59
Urban	53	68	92
% of households with durable goods			
TV	22	56	89
Fan	31	68	85
Refrigerator	4	9	43
Car	0	0	1
Motorbike	11	20	76
** Clean water is defined to include piped water, bottled water, water from deep wells with pumps, and rainwater.			
* Improved water sources are defined as clean water sources plus hand-dug, reinforced wells and filtered spring sources.			

Sources: 2010: immunization, malnutrition, and infant mortality statistics come from various rounds of the MICS; life expectancy from World Bank World Development Indicators database; all others from World Bank 2000.

1.30 Vietnamese today are also healthier and live longer than in the 1990s; infant mortality (deaths per 1,000 live births) had fallen to 14 in 2010, which is impressive even by middle-income standards, and life expectancy had risen to 74.8 years. There was also marked improvement in levels of nutrition, although stunting (low height-for-age) remains a concern in some regions of the country and among minority populations. While immunization coverage looks good on the surface—over 90 percent of children begin the recommended series of childhood immunization (for example, DPT1)—the 2010 Multiple Indicators Cluster Survey (MICS) documents immunization completion rates of only 60 percent (GSO 2011).

1.31 Access to infrastructure and local services improved; the number of households connected to the electricity grid increased from 77 percent in 1998 to nearly universal coverage (98 percent) by 2010. However, many households still do not have access to “improved” water sources,<sup>5</sup> particularly in rural areas, or sanitary latrines. But while challenges in these areas remain, there have been dramatic improvements in coverage since 1998.

1.32 Improvements are also notable in housing quality and ownership of durables. By 2010, 89 percent of Vietnamese households owned TVs (compared to 56 percent in 1998), 85 percent owned an electric fan (compared to 68 percent in 1998), 43 percent owned a refrigerator (compared to 9 percent in 1998), and a substantial 76 percent owned at least one motorbike (compared to 20 percent in 1998). If affluence and quality of life are reflected, at least in part, in the consumer durables that people own and use, then there have been dramatic improvements since the late 1990s.

1.33 According to the most recent national Human Development Report (HDR) for Vietnam (UNDP 2011), the country has achieved or is likely to achieve most of the MDG targets by 2015. However, concerns about clean water and sanitation remain (Goal 10), and Vietnam continues to make slow progress toward environmental goals (Goal 9).

### Progress is also apparent in composite indicators of well-being

1.34 Recent years have witnessed a greater focus on composite indicators of poverty and deprivation in Vietnam, beginning with the Human Development Index (HDI) in the early 1990s, and more recently the Multi-dimensional Poverty Index (MPI) launched in the 2010 Vietnam HDR.<sup>6</sup> The MPI builds on earlier work done to measure nonmonetary poverty, such as the approach to measuring child poverty developed by GSO and MOLISA with support from UNICEF, as well as the multidimensional poverty index used in the 2010 Urban Poverty Survey (UNDP 2011).

1.35 Vietnam has seen steady improvements in human development, evidenced by increases in the HDI over time: the HDI value increased 19 percent between 1992 and 2008. With an HDI of 0.728, Vietnam is now comfortably placed among medium human development countries (table 1.4).

**Table 1.4 Contribution of HDI Components to HDI Growth, 1992-2008**

Year	HDI	Life Expectancy Index	Contribution of Life Expectancy Index to HDI since Previous Period (%)	Education Index	Contribution of Education Index to HDI Growth since Previous Period (%)	Income Index	Contribution of Income Index to HDI Growth since Previous Period (%)
1992	0.611	0.670	—	0.776	—	0.386	—
1995	0.639	0.690	18.8	0.808	25.9	0.420	55.3
1999	0.651	0.721	86.1	0.803	-13.9	0.430	27.8
2004	0.701	0.782	40.7	0.826	15.3	0.496	44.0
2008	0.728	0.794	15.2	0.830	5.1	0.559	79.7
Contribution to total change in HDI 1992–2008			35.2	N.A.	15.9	N.A.	48.95

Sources: 2001 Vietnam HDR; HDI, 1992, 1995, 1999, 2004, 2008.

Note: HDI = Human Development Index, N.A. indicates not available.

5 See table 1.3 for definitions of “clean” and “improved” water sources.

6 The Government of Vietnam uses changes in the HDI and in the Gender Development Index as an indicator of progress toward human development and gender equality. Improvement in the HDI rank and value was also included as a target in the current SEDP 2001–2010. The SEDP 2011–2015 refers to improvements in the HDI as an indication of progress toward development goals, while the 2010 national MDG report cites positive change in the Gender Development Index as a sign of progress toward achieving gender equality and women’s empowerment.

1.36 The HDI is a composite index and there have been differences in progress for each of the different HDI sub-indices. Strong economic growth between 1992 and 2008 increased the income index by 45 percent. The life expectancy index also saw significant gains, rising by 19 percent between 1992 and 2008. This reflected steady improvements in average life expectancy from 65.2 years in 1992 to 72.7 years in 2008. The education index, which started from a relatively higher base in 1992, saw a slower rate of increase, rising by only 7 percent by 2008. The contribution of the education index to overall growth in the HDI decreased from around 25.9 percent from 1992 to 1995 to 5.1 percent from 2004 to 2008. Thus, since 1992, rising GDP, together with increased life expectancy, have been the main drivers of improvement in Vietnam's HDI. Slowing gains in life expectancy are to be expected once years of life expectancy reach higher levels. However, slowing gains in the education index may be cause for concern.

1.37 There is a strong correlation between elements of good governance and higher levels of human development. Of the six dimensions of Vietnam's Public Administration Performance Index (PAPI), public service delivery is most strongly correlated with the HDI, followed by transparency, participation at local levels, and vertical accountability. Similarly, control of corruption is also highly correlated with the HDI (CECODES, FR, CPP, and UNDP 2012).

#### **D. Despite this remarkable progress, the task of poverty reduction is not finished**

1.38 Vietnam has made remarkable progress toward its longstanding goal of eradicating poverty. By the end of the 2006–2010 SEDP, only 9.5 percent of households were estimated to live below Vietnam's official poverty lines, and poverty estimates based on the original GSO-WB basic-needs poverty line suggest similar results. Does this mean that the task of poverty reduction is finished, except for addressing a few remaining pockets of poverty, and a continuing commitment to look after the poorest and most destitute?

1.39 The task may be finished in terms of meeting the most basic food, shelter, and clothing needs of Vietnamese citizens. Vietnam rightly deserves to be recognized for this. But are these the right standards to apply in a rapidly growing, modernizing economy like Vietnam? The remainder of this chapter will discuss why the task of poverty reduction is not finished in Vietnam, and indeed has become more difficult in many respects.

1.40 The task of eradicating poverty is not finished because:

- Standards have changed. By the end of the 2006–2010 SEDP, Vietnam's system for measuring and monitoring poverty no longer adequately captured the living conditions of the population. The original GSO-WB poverty lines were set in the mid-1990s and do not reflect the consumption patterns or broader aspirations of the population today.
- Many of the erstwhile poor remain vulnerable to slipping back into poverty. Weather shocks, health shocks, and exposure to other income shocks remain widespread, and in some areas may even be rising.

1.41 Moreover, Vietnam's rapid pace of development has bred its own challenges. The economy has gone through massive changes since the late 1990s. Workers in their 40s and 50s made schooling and skills training decisions in a much different economy, based on a different set of incentives. Many do not have the skills or training to compete for jobs in today's rapidly modernizing economy. Even young workers often leave school without adequate training for an expanding skills-based economy.

1.42 The task of eradicating poverty has become more difficult in other important respects. Growth rates have fallen sharply compared to the first half of the 2000s, and growth is expected to remain sluggish in the foreseeable future. In addition, poverty reduction is becoming less responsive to economic growth. The remaining poor are harder to reach; the easy wins due, for example, to land

reforms in the early 1990s, rapid expansion in rural areas into cash crop production, and agricultural diversification have for the most part been realized. The remaining poor are more concentrated in isolated regions and among ethnic minority groups, where structural issues linked to assets and location are binding constraints (for example, poorer-quality land, less education and training, and more limited infrastructure and public services). Poverty reduction policies and programs must reflect these changing realities.

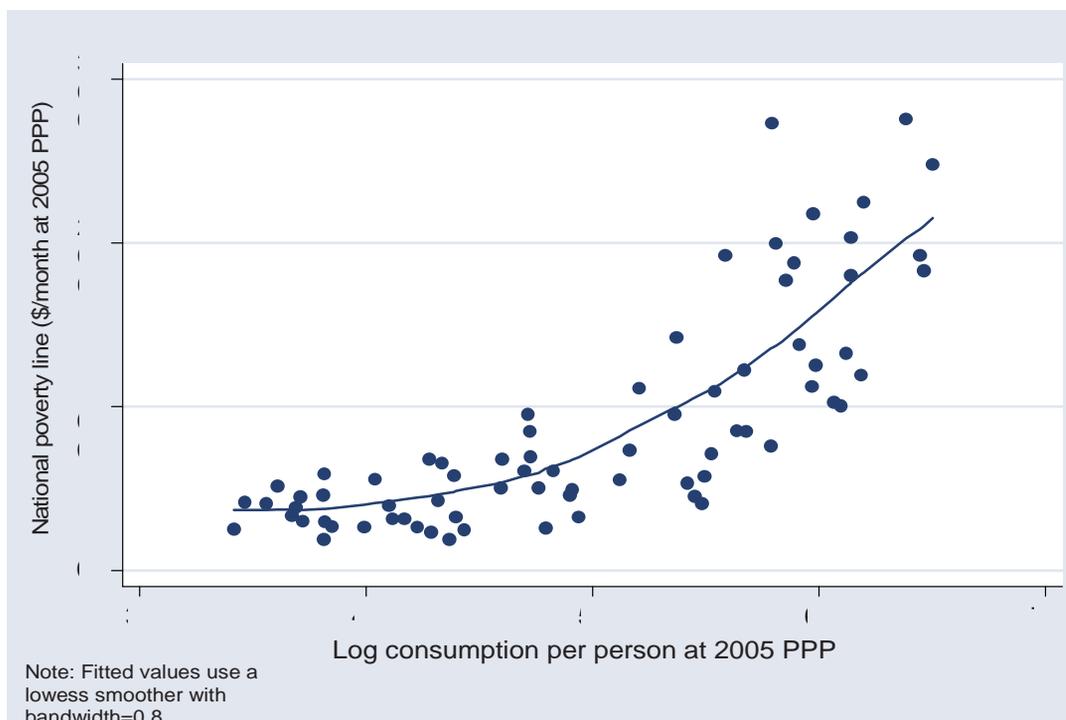
1.43 Vietnam's ongoing structural transformation to a market economy has given rise to trends that suggest new challenges for poverty reduction.

- Inequality is back on the agenda. There are widespread concerns among Vietnamese citizens from all walks of life about rising inequality. Recent analysis suggests an increase in income inequality between 2004 and 2010, driven predominantly by growing inequality within rural areas.
- Continuing disparities in human development contribute to income inequalities. While Vietnam has done a good job on coverage of basic services, quality is uneven, and there are large perceived gaps between better-off and poorer households and regions. With the push toward "socializing" health and education services, access has become more closely linked to incomes, and the burden of out-of-pocket spending for health and education is rising.
- Vietnam's cities and towns are growing rapidly, due in part to a massive influx of migrants from rural areas of the country. The cost of living in urban areas is rising, due to rising food costs and to rising demand, higher fuel prices, and water and electricity tariffs. The private sector accounts for an increasing share of the urban labor force, and many continue to work in the informal sector without social protection or employment benefits, as was revealed in a number of studies conducted in recent years such as the 2009 Urban Poverty Survey (Haughton et. al. 2010), various rounds of the Vietnam Academy of Social Sciences' (VASS's) Rapid Impact Monitoring (RIM) assessments of the global economic crisis (VASS 2009, 2011), and Oxfam-ActionAid's urban poverty monitoring studies (Oxfam GB/ActionAid 2008, 2011). New forms of vulnerability are developing, in particular among workers in the informal sector and rural migrants in cities like Hanoi and Ho Chi Minh City.

### **Poverty lines used to monitor Vietnam's progress are low by international standards**

1.44 When assessing Vietnam's performance in recent years, it is important to keep in mind that both official lines and the original GSO-WB poverty line are low by international standards, and, unlike in many other fast-growing economies, the GSO-WB line has not been revised since it was agreed in the mid-1990s. Using a constant standard to assess progress has many advantages. But most countries raise their standards—and their national poverty lines—as they become more affluent and as the aspirations and expectations of citizens change. Figure 1.3 shows the strongly positive relationship in developing and transition countries between national poverty lines (US\$ per month, 2005 PPP) and average per capita expenditures (2005 PPP) (Chen and Ravallion 2008). The overall income elasticity of the national poverty line for countries in the sample is .66, with a substantially higher elasticity for the nonfood component of poverty lines (.91) than the food component (.47). Thus, assessed globally, the economic gradient in national poverty lines is driven more by the gradient in nonfood needs, which account for more than 60 percent of the overall elasticity. This is not surprising; food consumption becomes a much smaller share of total consumption as populations become more affluent. In countries like the United States, for example, even the poor spend only 20 to 25 percent of total expenditures on food.

**Figure 1.3 National Poverty Lines Rise with Average Per Capita Consumption:  
Developing and Transition Countries (2005 PPP)**



Source: Chen and Ravallion 2008.

1.45 The poverty statistics cited in table 1.1 are based on the original GSO-WB poverty line of only US\$1.10 per person per month (2005 PPP), which is substantially lower than the US\$1.25 per person per day (2005 PPP) “international” poverty line calculated by the World Bank and used to measure global progress at reducing poverty. The US\$1.25 per person per day international poverty line sets a very low standard; it was constructed by averaging the national poverty lines for the 15 poorest countries in the World Bank’s database of comparator countries<sup>7</sup> (Ravallion, Chen, and Sangraula 2008). Higher international poverty lines are typically used for rising middle-income countries. The median poverty line for all developing and transition countries is US\$2.00 per person per day (PPP 2005), and the median line for all countries besides the poorest 15 countries is US\$2.50 per person per day (PPP 2005). An international poverty line of \$4.00 per person per day (PPP 2005) is used for a number of countries in Latin America.

### **Vietnam’s poverty lines are low relative to its rising prosperity and concomitant rising aspirations**

1.46 Poverty lines typically increase with economic development because norms change; what was considered an acceptable level of deprivation in the 1990s is no longer acceptable today. Poverty lines also rise because governments have greater capacity and more resources to respond to changing norms.

1.47 Evidence of changing norms is reflected in subjective poverty lines estimated using information reported by households in the 2010 VHLSS on the perceived adequacy of their current levels of consumption. Subjective lines suggest national poverty rates of 20 to 25 percent, substantially higher than current official poverty estimates (Chapter 2).

1.48 Changing norms and higher aspirations are also captured in a number of qualitative field studies and assessments that have been carried out over the past decade. For example, in the 1999 and 2003 Participatory Poverty Assessments (PPAs) carried out by the World Bank in collaboration

<sup>7</sup> Malawi, Mali, Ethiopia, Sierra Leone, Niger, Uganda, Gambia, Rwanda, Guinea-Bissau, Tanzania, Tajikistan, Mozambique, Chad, Nepal, and Ghana.

with other donors, international NGOs, and Vietnamese partners, poor respondents defined well-being in terms of adequate food, a stable asset endowment (adequate land, labor, and housing), plus nonmaterial aspects such as community respect and freedom from debt and anxiety (ADB 2003; World Bank 1999). Respondents in the more recent 2008 PPA did not refer to hunger or food security, but instead spoke about risks related to rising food prices, concerns about access to employment, and stable jobs (in the face of emerging impacts from the global financial crisis).

1.49 In research on ethnic minority poverty for this report (Annex 1.1), ethnic minority respondents in three regions were asked about indigenous definitions of success. The most common response was linked to sufficiency of basic needs: enough food to eat year-round, clothes to wear, decent housing, and ability to participate in cultural festivals and customs (such as being able to prepare a pig for the Tet festival). Other respondents realized that ideas of success were changing, pointing to increasing material prosperity and connections to the market economy. One minority official in Muong Khuong district, Lao Cai, said: “In the past it was considered enough to be full and dress warmly (*an no, mac am*); now people want to eat well and dress beautifully (*an ngon, mac dep*).” Traders mentioned having a larger, cleaner multistoried house as a key indicator of success. Among respondents who have transitioned to trading or other nonagricultural work, the desire for children to be educated and have stable jobs, particularly in the state sector, also formed part of a concept of success. Thus, ideas of well-being, even among poorer Vietnamese, are shifting from satisfaction of basic needs to a higher asset base combined with social status and non-income factors such as health and education.

### **Vietnam increased its official poverty lines in late 2010, and a revision to the GSO-WB line is proposed in this report**

1.50 Despite intense internal debate—many policy makers believe Vietnam should set more ambitious goals in the fight against poverty, given its rapid economic growth and vision of itself as a modern industrial society—the new official poverty lines set in 2010 for the 2011–2016 SEDP are still low by international standards. The new urban line is still well below US\$2 per person per day (2005 PPP), and the new rural line is only a little above the US\$1.25 per person per day lines applied in the world’s poorest countries.

1.51 As noted, the World Bank is working with the GSO and other local partners to update GSO’s poverty monitoring system, through improvements to the VHLSS household survey; more comprehensive welfare aggregates; and a revised GSO-WB poverty line, using an updated food reference basket (from the 2010 VHLSS), a more comprehensive measure of nonfood spending that includes the flow of consumption from household assets (consumer durables and housing), and new spatial cost-of-living indexes.

### **Despite progress, many households remain vulnerable to falling into poverty in Vietnam, and new sources of vulnerability are emerging as a result of external global events and internal instability**

1.52 Although tens of millions of Vietnamese households have risen out of poverty over the last decade, many have incomes very near the poverty line and remain vulnerable to falling back into poverty as a result of idiosyncratic shocks, such as job loss, accidents, death or illness of a household member, or economy-wide shocks, for example, effects of climate change on rainfall and temperatures, human and animal influenza pandemics, and impacts of the recent global financial crisis. The combination of large shocks and many small, often local shocks can be difficult to manage for poor, near-poor, and even nonpoor households. The strategies that households use to cope with unanticipated shocks, such as reducing spending on health care, selling off assets like land and livestock, and taking children out of school, can themselves have longer-term adverse consequences. At any point in time, apart from the households we observe living below the poverty line, there may be an additional number of households that face the risk of falling back into poverty—that is, households that remain vulnerable to poverty.

1.53 Some studies have equated vulnerability with the near-poor—households whose incomes lie above but still very close to the poverty line. As noted, Vietnam has defined near-poor poverty lines

that are 1.3 times the official poverty line. If a similar approach to defining the near poor is applied to the 2010 GSO-WB poverty line, there were 13 million near-poor households in 2010 in addition to 18 million poor households. The 2008-2010 VASS poverty report (VASS 2011a) used a different methodology to measure vulnerability-to-poverty. The report analyzed poverty dynamics using a panel data set from the 2002, 2004, and 2006 VHLSS and found that one-fourth of those who were poor in 2002 were chronically poor (poor in all three periods), while the remaining three-fourths experienced temporary bouts of poverty and thus were labeled the transient or stochastic poor. The work found a great deal of churning—households moving above and below the poverty line—over the period, including a number of households that escaped poverty. Ethnic minority households were much more likely to be among the chronic poor.

1.54 Additional evidence is presented below, using a methodology initially developed and applied in a Poverty Assessment for China (World Bank 2009), to assess vulnerability to poverty based on a panel of 1,800 households from the 2004, 2006, and 2008 VHLSS. It constructs an index of vulnerability-to-poverty, defined as the share of the population who were poor in at least one year (2004, 2006, or 2008) divided by the average poverty rate across all three years. The results summarized in table 1.5 suggest that a considerable number of households in Vietnam that are not poor in a specific year nonetheless remain vulnerable to falling into poverty at some point in time. At the national level, only 7 percent of panel households were among the chronic poor (poor in all three years), despite an end-period (2008) poverty rate of 13 percent. Vulnerability to poverty was particularly high in wealthier areas of the country such as the Red River Delta (where Hanoi is located) and the Southeast (where Ho Chi Minh City is located). It was also surprisingly high in provinces in the South Central Coast and Mekong River Delta. Consistent with VASS findings, upland regions with a high proportion of ethnic minorities evidenced higher rates of chronic poverty.

**Table 1.5 Vulnerability to Poverty Remains High in Vietnam**

Consumption poverty (GSO-WB)	(percent)									Vulnerability- to-poverty ratio
	Poor in all 3 years	Poor in 2 of 3 years	Poor in 1 of 3 years	Poor in at least 1 year	Not poor in any year	Headcount, 2004	Headcount, 2006	Headcount, 2008	Average headcount, 2004-2008	
Subgroup	(1)	(2)	(3)	(4) = (1)+(2)+(3)	(5)	(6)	(7)	(8)	(9) = [(6)+(7)+(8)] /3	(10) = (4)/(9)
National	7.0 (27)	6.7 (26)	12.3 (47)	26.0 (100)	74.0	20.0	13.7	13.0	15.6	1.7
Red River Delta	2.1 (13)	5.0 (32)	8.5 (54)	15.7 (100)	84.3	10.9	7.5	6.5	8.3	1.9
East Northern Mountains	10.4 (33)	10.3 (33)	10.8 (34)	31.5 (100)	68.5	26.3	17.3	19.0	20.9	1.5
West Northern Mountains	40.5 (56)	15.8 (22)	16.2 (22)	72.5 (100)	27.5	59.5	51.4	58.4	56.5	1.3
North Central Coast	10.3 (25)	11.5 (28)	19.9 (48)	41.7 (100)	58.3	32.5	25.7	15.6	24.6	1.7
South Central Coast	9.8 (35)	8.2 (29)	10.0 (36)	28.0 (100)	72.0	24.0	15.7	16.0	18.6	1.5
Central Highlands	19.1 (57)	10.3 (31)	3.9 (12)	33.3 (100)	66.7	31.8	27.9	22.2	27.3	1.2
Southeast	3.1 (28)	1.6 (14)	6.3 (57)	11.0 (100)	89.0	8.2	6.2	4.5	6.3	1.8
Mekong River Delta	2.2 (8)	4.2 (16)	20.0 (76)	26.4 (100)	73.6	16.9	6.7	11.5	11.7	2.3
Rural	8.8 (28)	8.2 (26)	14.3 (46)	31.3 (100)	68.7	24.4	16.6	16.0	19.0	1.6
Urban	0.7 (10)	1.6 (21)	5.3 (70)	7.5 (100)	92.5	4.4	3.6	2.5	3.5	2.1
Ethnic minority	34.0 (50)	19.4 (28)	15.3 (22)	68.7 (100)	31.3	59.7	49.0	47.5	52.1	1.3
Ethnic majority	2.6 (14)	4.6 (24)	11.8 (62)	19.1 (100)	80.9	13.6	8.0	7.4	9.7	2.0

Source: VHLSS tabulations using 2004, 2006, and 2008 panels of households.

1.55 Vietnam's rich body of qualitative research on poverty documents continuing concerns about vulnerability. The 1999 Participatory Poverty Assessment (PPA) identified a number of important sources of vulnerability such as crop failures (weather shocks, insects and other pests, landslides), human disasters (severe illness, death of a laborer, alcoholism, drug addiction), other economic shocks (job loss, death of animals, business failures), and material crisis (damage to homes, theft, and violence). (Vietnam-Sweden Mountain Rural Development Program, ActionAid, Save UK, Oxfam GB 1999)

1.56 Risks were also discussed by respondents in the 2003 and 2008 PPAs. The 2008 PPA (see VASS 2009) highlights the fragile balance between opportunities and risks; households must grasp new economic opportunities in order to move out of poverty, but there are risks inherent in grasping new opportunities, and households may be pushed back temporarily into poverty as a result of setbacks, temporary loss of assets, or changes in family circumstances. Many households raised concerns about rising debt and worries about being caught in a "debt spiral." There is widespread evidence that health shocks have pushed some households back into poverty; affected households report selling assets and taking on extra debt in order to cope with health shocks.

1.57 Activities are underway to monitor the impacts of recent shocks on poverty. Oxfam GB and ActionAid<sup>8</sup> carried out an annual program of poverty monitoring in 12 sites in Vietnam (nine in rural areas, three in urban areas) between 2007 and 2011, and VASS (with active participation from development partners) carried out several rounds of a Rapid Impact Monitoring (RIM) study beginning in late 2008. (Oxfam GB/ActionAid 2008-2011; VASS 2011b) Results highlight the importance of occasional and often severe individual risks (for example, health related) coupled with more common seasonal risks that are local-context specific (for example, bad weather) in affecting household living conditions. They also document the emerging impacts of "macro" risks such as inflation and global economic crises. Even for the most affected groups, while macro risks worsened existing difficulties (for example, reduced purchasing power), they were found to rarely cause households to relapse into poverty. However, risk and vulnerability were noted as important causal factors in chronic poverty, and were linked to slow poverty reduction among ethnic minority households. Evidence from the RIM and related studies suggests that the 2009 global crisis had a negative but short-lived impact on the living standards of poor households, with particularly adverse effects on Vietnam's large pool of migrants workers—many of whom work in factories with foreign links (via export production or foreign employers)—and rural households whose livelihoods depend on migrant remittances.

1.58 Three new qualitative field studies were carried out for this report highlight new and old sources of poverty and vulnerability (short summaries are provided in Annex 1.1). Low-income respondents in a study designed to explore "perceptions of inequality" raised concerns that inflation could widen the gap between the poor and better-off and thereby further reduce opportunities to access education, health care, and other services. Competition for jobs will increase if the economy continues to slow, and good jobs are likely to go to applicants with the right connections or who are willing to pay bribes to potential employers. Concerns about land acquisition have been widely discussed in the press, and were raised again in the perceptions of inequality study as well as a new study carried out jointly by the World Bank and Oxfam to identify the "long-run drivers of poverty reduction" in Vietnam. Erstwhile rural households living in or near urban centers felt vulnerable to having their cultivable land acquired for industrial and other development purposes. Few felt they would be properly compensated for the loss of land, and most saw land acquisition as resulting in an inevitable drop in living standards. A third "positive deviance" study of poverty among ethnic minorities analyzed a range of concerns specifically linked to poverty and progress among ethnic minorities. Minorities depend heavily on earnings from agriculture, both crops and animal products, and were particularly vulnerable to weather shocks and other natural disasters, also to commodity and input price volatility. Ethnic minority respondents were acutely aware of the substantial and persistent gap in living conditions between minority and Kinh households, which they attributed to a number of factors including e.g. gaps in opportunities and differences in treatment.

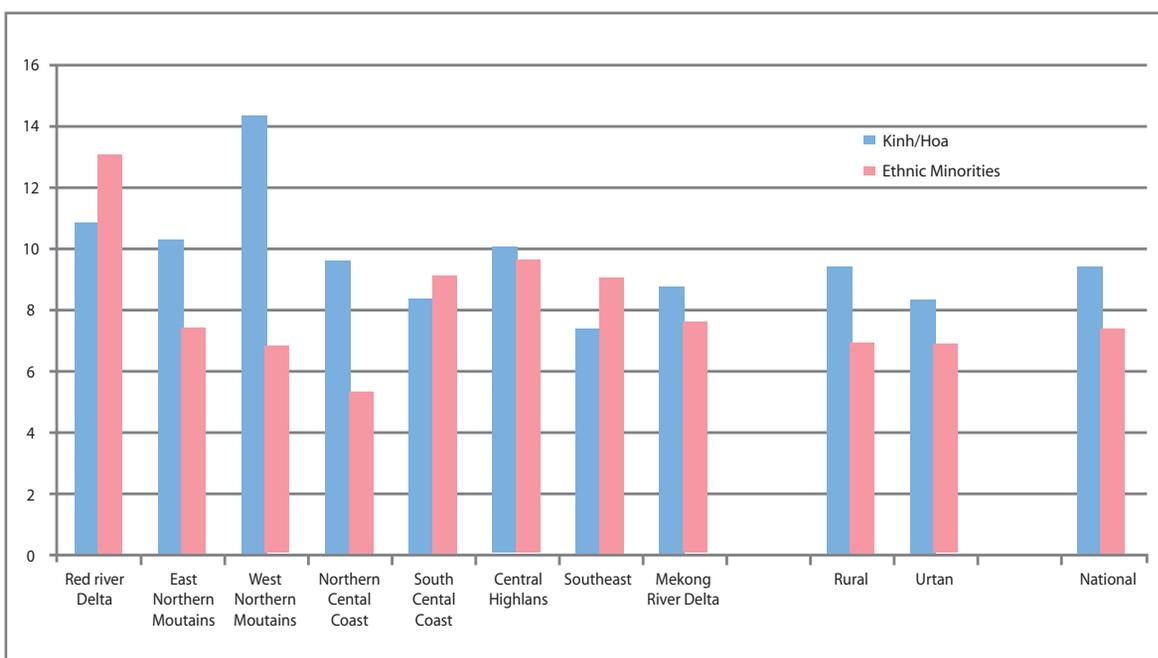
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8. This monitoring was conducted for Oxfam GB and ActionAid by the Ageless Consulting Company.

**Poverty is increasingly concentrated among Vietnam’s ethnic minority populations, who comprise less than 15 percent of the population but nearly half the remaining poor and two-thirds of the extreme poor.**

1.59 Vietnam has 54 officially recognized ethnic groups, of whom the Kinh (Viet) are by the far the most numerous, accounting for nearly 74 million people (85.7 percent of the total population) according to the 2009 Population and Housing Census. In 2009, there were five other ethnic groups (the Tay, Thai, Muong, Khmer, and H’mong) with populations of more than 1 million, and another three (the Nung, Dao, and Hoa) whose populations are between 500,000 and 1 million. There are also a number of ethnic groups with populations of less than 5,000 people. With the exception of the Hoa (Chinese), Khmer, and the Cham, most ethnic minority groups live in highland or upland areas, away from the coastal plains and major cities. The largest minority populations are found in the North-West and North-East and the Central Highland regions, although there are also ethnic population clusters in the North-Central, South-Central, and Mekong regions.

**Figure 1.4 Kinh and Ethnic Minorities: Average Annual Rates of Real Growth in Per Capita Expenditures, 1998–2010**



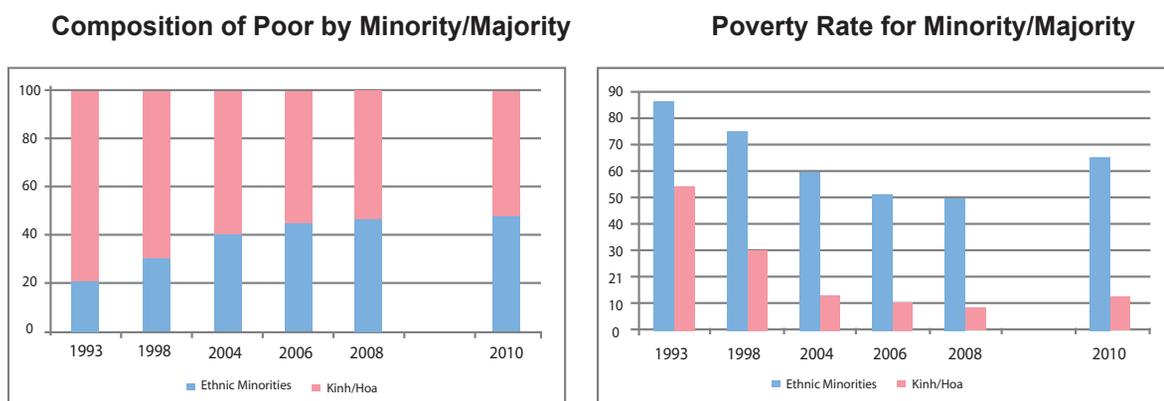
Sources: 1998 VLSS and 2010 VHLSS.

1.60 Despite remarkable progress in reducing overall poverty, including a steady reduction in ethnic minority poverty, there remains a substantial and widening gap in living conditions and poverty rates between the Kinh majority and ethnic minorities. This is illustrated in figure 1.4, which graphs annualized real rates of growth in per capita expenditures (from the 1998 VLSS and 2010 VHLSS) between 1998 and 2010, by region and ethnicity. Since 1998, per capita expenditures have grown at an average annual rate of 9.4 percent for the Kinh and only 7.4 percent for ethnic minorities. Disparities are largest in some of the poorest and least accessible regions of Vietnam. As discussed in Chapter 6, in recent years growth in income has been uneven across minority households, with higher rates of growth among the better-off. Even the fastest-growing minority households are growing more slowly than the average Kinh households.

1.61 Consistent with differential rates of growth, the concentration of minorities among the poor is rising; in 1993, poverty was widespread and minorities comprised only 20 percent of all poor households (figure 1.5). By 1998, the share of minorities among the poor had increased to 29 percent, and by 2010, minorities accounted for 47 percent of the total poor in Vietnam and a

resounding 66 percent of individuals in the poorest 10 percent of the population. According to the updated GSO-WB poverty line, 66.3 percent of minorities were poor in 2010 compared to only 12.9 percent of the Kinh.

**Figure 1.5 Ethnic Minority Poverty Rates and Changing Composition of the Poor, 1993–2010**



Sources: 1993, 1998 VLSS; 2004, 2006, 2008, 2010 VHLSS.

1.62 The increasing concentration of minorities among the poor and extreme poor is a serious concern. But not all minorities are poor. There is encouraging evidence of improvements in welfare levels and livelihoods for many minority groups in recent years, and recent analysis of the 2010 VHLSS documents the presence of some better-off ethnic minority households among middle- and upper-income deciles. These issues are explored in greater depth in Chapter 5, which describes encouraging signs of progress in some areas and among some groups, and identifies important pathways for progress.

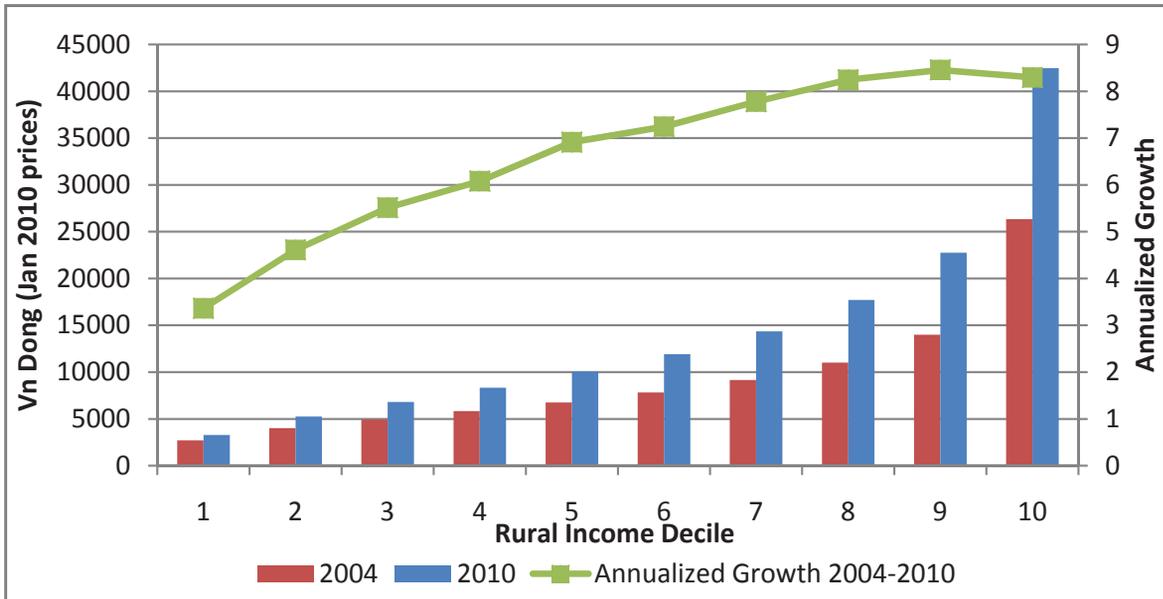
### In recent years, growth has favored the better-off, resulting in rising income inequality

1.63 Past work suggests that Vietnam’s development trajectory was one of growth without an appreciable rise in inequality (VASS 2010). The picture has evolved in recent years, however, and there is growing evidence of rising inequality. A new study of citizen perceptions of inequality carried out as background for this report (Annex 1.1) suggests a widespread sentiment that inequality has risen; the sentiment is shared widely across rural and urban populations, and by both rich and poor.

1.64 The annual rate of growth in real household incomes averaged 8 percent between 2004 and 2010, based on successive rounds of the VHLSS. However, growth since the mid-2000s has been uneven across households, with richer households experiencing stronger growth than poorer households. The variation in growth across households is a reflection of a number of powerful, and potentially opposing, changes in the economic fabric: changes in the returns to education and skills in labor markets, sectoral and occupational transitions, and geographic mobility as individuals leave rural areas in search of work. These forces interact with initial differences in human capital and access to services, as well as “procedural” and institutional inequalities, such as differences in voice and participation among social groups and access to power and influence, to generate differences in living conditions across the population.

1.65 Figure 1.6 presents a growth incidence curve<sup>9</sup> using per capita income and shows growth rates by ranked income group between 2004 and 2010. Real income growth rates over the period varied considerably for households at different points in the income distribution, ranging from around 4 percent for households at the bottom of the income distribution to 9 percent for households at the top. Growth was pro-poor, in as much as it contributed to continued progress toward reducing poverty over the period. However, because growth has favored better-off households, both the relative and absolute gap in incomes between the rich and the poor has risen over time.

**Figure 1.6 Growth in Income Per Capita by Income Group, 2004-10**



Source: 2004, 2010 VHLSS.

1.66 The uneven growth process has contributed to rising inequality and is contributing to concerns about increasing social and economic disparities. The Gini index of income inequality has risen modestly from 0.40 to 0.43, adjusted for variations in prices across regions. Inequality in Vietnam in 2010 was comparable to that in other middle-income countries in the region, such as Indonesia and Thailand, although it was lower than in China. This growth has been accompanied by a shift in the share of income from the bottom 60 percent of the population to the top 40 percent. The share of income accruing to the top decile increased by 2 percentage points between 2004 and 2010. To place this figure in context—the increase in the share of income going to the top 10 percent was almost as large as the total share of income going to the bottom 10 percent in Vietnam in 2010. Meanwhile, over the same period, the share of income accruing to the bottom 10 percent decreased by 20 percent. Focusing on the top tail of the income distribution, the share of income of the top 5 percent rose from 20.6 percent to 22.5 percent between 2004 and 2010. In this respect, the patterns are similar to those in China and India, where the top 5 percent of income earners earned 20.5 and 21.3 percent of income and consumption, respectively (ADB 2012).

1.67 The trend of rising inequality with economic growth is common across many developing countries in the East Asia and Pacific region. While rising income inequality may be a manifestation of growth processes that raise overall income and reduce poverty, and can thus be considered a natural consequence of an economic landscape favoring entrepreneurship, innovation, and economic progress, if left unchecked some types of inequalities can lead to rising social tensions and to undermining social cohesion. The “perceptions of inequality” study documents “acceptable” and “unacceptable” sources of inequality; wealth is acceptable (and admired) if achieved through hard work, luck, or acquiring more and better education. But wealth obtained through illegal means or misuse of power or influence is not acceptable. As Vietnam continues to grow and basic needs poverty is no longer the primary concern, it will be increasingly important to monitor and promote equitable growth processes that ensure all Vietnamese share in benefits of rapid development.

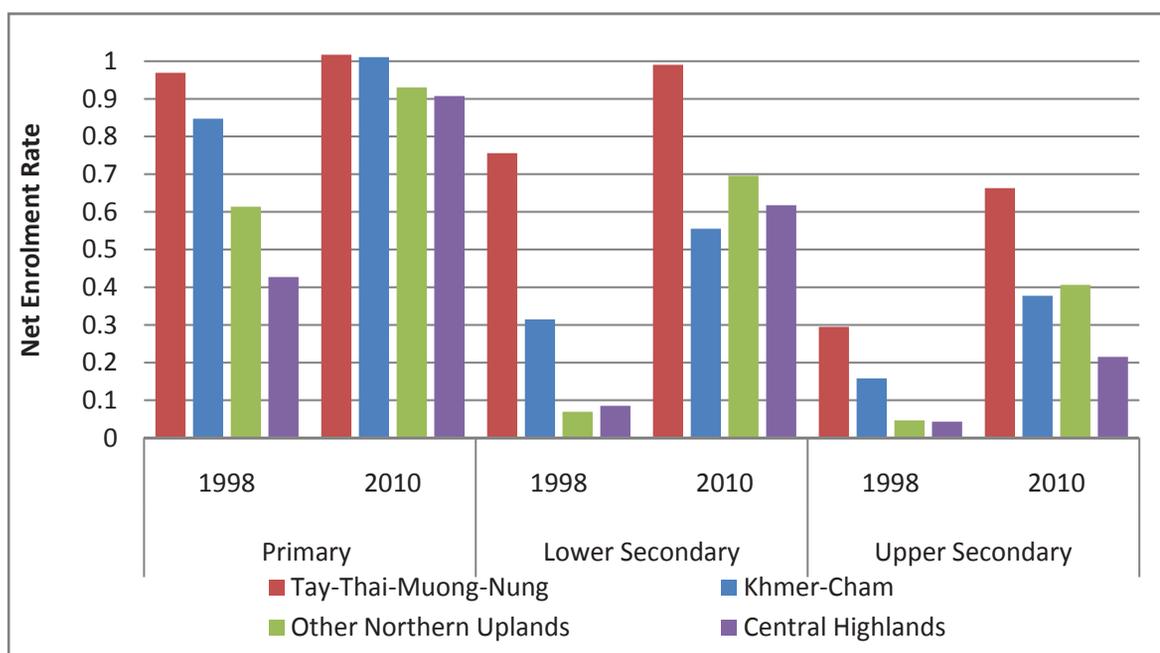
9 A growth incidence curve plots the annual rate of growth between two points in time for specific percentiles of the income distribution (Ravallion 1997).

## Disparities in other aspects of human development remain and in some cases appear to be widening

1.68 Vietnam has not only succeeded in raising incomes. Progress in human development has been equally impressive. But as in the case of income growth and poverty reduction, progress has been uneven. Inequalities may undermine growth processes if they are driven by disparities in circumstances—such as ethnicity, gender, and unequal opportunities for acquiring a good education—that ultimately prevent some groups from benefiting equally in the gains from high growth and development.

1.69 Consider the example of education. Figure 1.7 depicts the ratio of enrolment rates for majority children compared to enrolments for several ethnic minority groups. A ratio of less than 1 indicates that minority children are participating in school at a lower rate than the majority. Although there has been considerable progress since 1998, ethnic minority populations continue to have lower enrolments than the majority, and these differences are substantial at the upper secondary level.

**Figure 1.7 Ratio of Ethnic Minority to Kinh Majority Enrolment Rates in Public Schools, by Level of Education, 1998 and 2010**



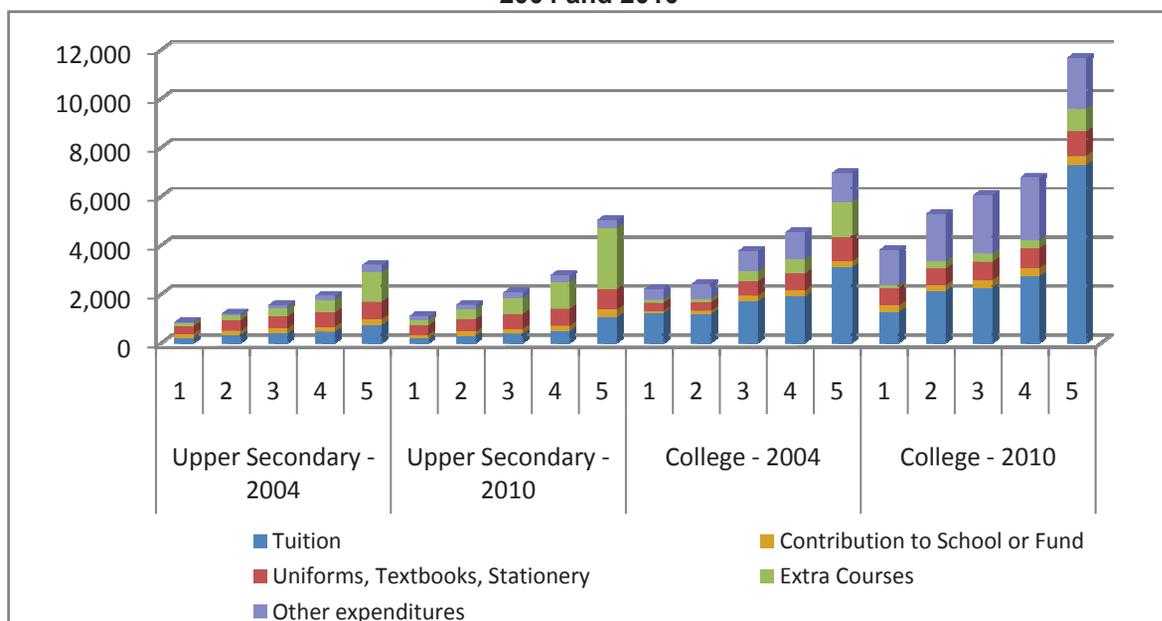
Source: 1998 VLSS, 2010 VHLSS.

## Incomes matter in terms of access to quality health and education services

1.70 The growing emphasis on “socialization” in the provision of health and education services in Vietnam—which stresses the sharing of social costs and responsibilities between individuals and the state and non-state sectors—means that incomes are beginning to matter more for determining access to basic services. Rising disparities in incomes will contribute to rising social disparities, including disparities in school enrolments (particularly for secondary and higher education) and access to health services.

1.71 A direct consequence of this is that the burden of out-of-pocket health and education expenditures is substantial, particularly for less-well-off households. Analysis based on the VHLSS shows that spending on education rose in real terms between 2004 and 2010 across all levels (figure 1.8), and out-of-pocket costs are higher as students move from primary to lower and upper secondary levels. Compared to the poor, better-off households spend substantially more on education in general and in particular on extra courses and after-school tutoring. Given these advantages, it is not surprising that students from wealthier households perform better in the classroom and on standardized tests, and are more likely to obtain higher degrees and training.

**Figure 1.8 Out-of-pocket Spending per Student, by Education and Expenditure Quintile, 2004 and 2010**



Source: 2004, 2010 VHLSS.

1.72 Research suggests that while ill health is more concentrated among the poor, they are less likely than the better-off to use health services (World Bank 2012). Moreover, the distribution of public spending in the health sector decidedly favors the better-off; spending on commune health centers, utilized by the rural poor, is small compared to spending on government hospitals utilized by the better-off. Concerns have been raised about the impoverishing effects of catastrophic health costs, including that the poor will forego care when faced with serious illnesses. Most of the poor have free health cards, which help to reduce the costs they pay for services, but with concomitant concerns about the quality of care they receive. A number of studies highlight Vietnam's high out-of-pocket (OPP) health payments; these persist despite improvements in the coverage of the National Health Insurance Scheme as a result of the 2008 Law on Health Insurance. The new law provides fully subsidized health insurance premiums for the poor, and partially subsidized premiums for the near-poor. However health insurance has had a modest impact on reducing out-of-pocket health payments (Lieberman and Wagstaff 2008; Wagstaff 2007) including catastrophic health costs. Households with young children and elderly members have higher exposure to health risks and report higher rates of catastrophic health spending. (Hoang Van Minh et. al. 2012)

### Urban residents face significant challenges of rising costs and economic instability

1.73 Vietnam has weathered the global economic storm following the financial crisis of 2008–09 better than most countries. Growth hit a decade-low 5.3 percent in 2009, down from a decade-high 8.5 percent just two years before, but in 2010 it bounced back to 6.8 percent. It slipped again to 5.9 percent in 2011, but remained more than 1 point above the average for emerging and developing economies. Growth in 2012 was only 5.7 percent.

1.74 Behind this resilience, however, is a more complicated story of volatility and vulnerability, which plays out in Vietnam's cities and towns. As export demand fell following the global financial crisis, so did demand for factory labor. Fortunately, the labor market bounced back quite quickly and strongly, in terms of number of working hours and wages in nominal terms. Urban residents were buffeted by inflationary shocks before and after the crisis. In 2008, the GSO reported a price increase of 23 percent overall as Vietnam felt the effects of the global food crisis—with food price inflation registering at 34 percent. Inflation moderated in 2010, but rose again in 2011, to around 18 percent nationally, in both urban and rural areas, with a steeper rise in the price of food and foodstuffs and electricity and fuel.

1.75 These events have brought considerable challenges for urban residents, which have been documented in a number of studies and rapid assessments including those by Oxfam/ActionAid, VASS, and the UNDP/GSO cited earlier. For example, 65 percent of households surveyed in the 2009 Urban Poverty Survey reported higher prices for food and essential items as a source of difficulties, making inflation by far the most common factor among job loss, business slowdowns, natural disasters, health shocks, and others (16 percent of households reported job loss or business slowdown as a source of difficulty). On a positive note, a price impact survey undertaken by Oxfam GB and ActionAid in May 2011 found that inflation has not caused families to go hungry or children not to attend school (which may be due to parents giving top priority to their children's education). Still, serious issues remain. Those living off of savings or fixed incomes, which are not inflation-indexed, such as pensioners, beneficiaries of social protection, and those unable to work due to health issues, are vulnerable to the effects of inflation in obvious ways.

1.76 Combined with employment instability like that introduced by the global recession, inflation also poses especially acute issues for migrants who move to urban areas seeking better work. Migrants already tend to face higher prices for accommodation, electricity, and water than local residents and have difficulty accessing social services; they are therefore especially endangered by instability in their livelihoods. Migrants surveyed in Oxfam/ActionAid's fourth round of participatory monitoring of urban poverty (Oxfam/ActionAid 2011) reported that wage increases have failed to keep pace with price increases; their average monthly expenditures net of savings and remittances increased 87 percent between 2008 and 2011, while monthly income increased only 66 percent. There have been signs of rising labor tension as a result of this dynamic, and a reduction in remittances to rural areas. Instability in urban livelihoods bears not just on urban poverty, but, via this remittance mechanism, on poverty in rural areas, as well.

## **E. Overview of the report: Vietnam's old and new poverty reduction challenges**

1.77 This report takes the view that despite remarkable progress, the poverty reduction task in Vietnam is not complete. The report aims to do three things.

1.78 First, it proposes revisions to Vietnam's poverty monitoring system in Chapter 2, including improvements to the VHLSS, more comprehensive welfare aggregates, and a new poverty line, with the aim of bringing these more in line with economic and social conditions in present-day Vietnam. Second, Chapter 3 uses the new methodology to revisit the stylized facts about deprivation and poverty in Vietnam, and develops an updated profile of poverty using data from the 2010 VHLSS and new qualitative field studies. Third, the report selectively analyzes some of the key challenges for poverty reduction in the next decade. Chapter 4 presents new poverty maps based on the 2009 Population and Housing Census and 2010 VHLSS and compares these to earlier poverty maps based on the 1999 census. Chapter 5 focuses on ethnic minority poverty, with the aim of identifying not only the current constraints faced by minority populations but also by documenting important signs of progress. Chapter 6 takes a new look at inequality of outcomes and opportunities, combining analytic work using the VHLSS with findings from the qualitative study of perceptions of inequality.

## Chapter Annexes

### Annex 1.1: New qualitative research carried for the 2012 Vietnam Poverty Assessment

#### (1) “Positive deviance” study on ethnic minority poverty

This field study, carried out from November 2011 – February 2012, aimed to identify ethnic minority communities that show unusually strong poverty reduction and income growth and identify factors contributing to these positive results. Positive deviance is a methodology that originates in Vietnam, from a 1990s nutrition program led by Save the Children; it has since been applied worldwide by NGOs and researchers (Marsh et al 2004, Ramalingam 2011). Successful families and communities are “positive” since they escape poverty despite facing the same challenges and obstacles as their neighbors, and “deviants” (or outliers) because they practice different behaviors from others.

The researchers visited ethnic minority communities in Dak Lak province (Ea H’leo district), Tra Vinh province (Chau Thanh and Tra Cu districts) and Lao Cai province (Muong Khuong and Bac Ha districts), conducting semi-structured interviews with over 100 ethnic minority residents and local government officials. Sites were selected using a combination of quantitative analysis and a snowball sample based on expert recommendations and secondary literature. Data from census samples was analyzed to determine rates of poverty reduction (or increase) among ethnic minority respondents only in each province and district over the periods 1999-2006 and 2006-09. Census data was also processed to calculate the mean reported expenditures of ethnic minority respondents (as a proxy for income) by province and district and the percentage of the ethnic minority sample in the top 15 percent of expenditures that resides in each location. A series of qualitative hypotheses was then developed of possible factors leading to poverty reduction and income growth, outlining “provocative propositions” for qualitative data collection that were explored through interviews and observation in field sites.

#### (2) Identifying Long Run Drivers of Poverty Reduction: The Q-square pilot

Oxfam and the World Bank carried out a qualitative pilot study in August, 2011 to identify what have been key long run drivers of poverty reduction over the past two decades in Vietnam. The study was framed around the complementary concepts of opportunities and constraints in assessing income and welfare dynamics at the household and community levels. The longer run aim was to develop a panel data set of households and communities spanning 20 years, drawing on the initial set of communities and households surveyed in the 1992/93 and 1997/98 VLSS.

Sites were selected from the 1997/98 VLSS list of districts/communes based on district-level poverty rates and the district-level population of ethnic minorities and Kinh/Hoa. Efforts were made to visit a range of locations, roughly representative of Vietnam’s different regions. In total, the team interviewed 220 households that had been initially surveyed in the VLSS panel, updated household rosters for these households, and held groups discussions with nearly 250 respondents at both village and commune levels.

A series of qualitative exercises were carried out including (i) wealth ranking; (ii) time-line exercises are used to explore commune and village histories since 1992 and (iii) card-sorting exercises and mobility diagrams to list and rank opportunities and constraints in the communities over the two decades. Village officials are also asked to discuss their perceptions of how life had changed, what had happened to poverty levels since the early 1990s. Additional life-history interviews and diagrams are conducted with representatives from selected households, focusing on households who had done exceptionally well (and why) or done very poorly (and why). The team also interviewed important ‘change agents’ such as local businesses, cooperatives, shops, and projects/programs.

#### (3) Exploring Perceptions of Inequality in Vietnam

A field study was carried out in March and April 2012 that aimed to collect and analyze information on perceptions of inequality held by diverse elements of Vietnamese society. The work explored three key areas: (i) perceptions of social and economic disparities within and between different reference

groups; (ii) the factors that determine these perceptions, and (iii) the extent to which disparities have changed over time. Discussions were organized around a number of reference focus groups i.e. better off households, poor households, senior citizens, groups of students as well as working young people, and (in the case of urban areas) rural to urban migrants. Three sentinel groups of sites were selected -- six locations in metropolitan cities, two locations in smaller cities, and seven locations in rural areas.

Four overlapping aspects of inequality were highlighted by all groups – inequalities in economic outcomes (incomes, wealth), as well as inequalities in access to education, jobs, and land. Causes of inequality were seen as overlapping and complementary e.g. some rural respondents raised concerns about the poor quality of education in their areas, which contributed to poor skills and unequal access to good jobs. There was strong support for policy measures to ensure equality of opportunities. Many respondents, particularly young, educated people living in urban areas, were tolerant of inequalities in outcomes – for example, ownership of fancy cars, big houses, and the latest technology – so long as these gains were earned through hard work and legitimate means. Many groups raised concerns about ill-gotten gains, bribery and misuse of power leading to rising inequalities. And there were widespread concerns about 'procedural' inequalities – the gaps in how systems were supposed to work in principle but failures of systems to work properly in practice e.g. implementation of land compensation policies.

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# Chapter 2

## Updating Vietnam's Poverty Monitoring System

*Vietnam's poverty monitoring system was updated to reflect changing economic conditions since the first Vietnam Living Standards Survey was conducted in 1993. New, comprehensive consumption aggregates were created using data from the 2010 Vietnam Household Living Standards Survey (VHLSS). The GSO-WB poverty line was updated using these aggregates: the new line is 653,000 VND per person per month, yielding a national poverty rate of 20.7 percent.*

## A. Introduction

2.1 Vietnam has a robust system for monitoring changes in poverty, based on a long-running system of nationally representative, comparable Vietnam Household Living Standards Surveys (VHLSS); consistent estimates of household welfare; and a poverty line that has been kept constant in real purchasing power since the mid-1990s, when it was agreed between the General Statistics Office (GSO), the World Bank (WB), and other development partners.<sup>10</sup> Consistency in methodology and comparability over time are two of the great strengths of Vietnam’s poverty monitoring system. However, by 2009, it had become clear that key aspects of Vietnam’s poverty monitoring system were outdated. The methods used to measure household welfare and construct the original GSO-WB poverty line were based on economic conditions and the consumption patterns of poor households in the early 1990s. Conditions have changed: Vietnam today is very different from Vietnam in the 1990s. The economy is more diversified and better integrated in the global economy. Connectivity and access to markets have improved, even for households living in more remote rural areas. In addition, the production structure of households has changed: households have access to a much wider array of consumer goods, and they purchase more food from the market rather than producing it at home. Incomes are more diversified, and there has been a rapid shift out of agriculture and into industry and services. These changes affect households across the income distribution. Especially important for determining a poverty line, the consumption patterns of poor households today are substantially different from those of the 1990s.

2.2 This chapter describes revisions and updates to Vietnam’s poverty monitoring system, including improvements to the 2010 VHLSS (and subsequent rounds), revisions to the definition of household welfare to make it a more comprehensive measure of well-being, new indexes to adjust for spatial cost-of-living differences, and an update to the original GSO-WB poverty line. The methodology to construct the new poverty line is consistent with the original GSO-WB methodology, but is based on new information from the 2010 VHLSS.<sup>11</sup> The revisions described in this chapter result in a higher estimate of poverty for 2010 than the original GSO-WB poverty line would have yielded, and, particularly for rural areas and areas with high numbers of ethnic minority households, higher poverty estimates compared to official estimates. Reasons for these differences are also discussed.

2.3 The chapter also describes a new methodology for estimating “subjective” poverty lines, drawing on experimental questions introduced in the 2010 VHLSS. Poverty estimates based on the subjective poverty line are very similar to those using the updated GSO-WB poverty line.

2.4 The 2010 VHLSS can only give reliable estimates of poverty at the national level, for urban and rural areas and by region. This is due to sample size and design of the sample of the VHLSS, which includes information on both expenditures and incomes. Chapter 3 describes a small-area estimation (poverty mapping) methodology that can be used to estimate poverty at lower levels of disaggregation—in Vietnam’s case, for provinces and districts—and presents new district- and provincial-level poverty maps based on the 2009 Population and Housing Census and 2010 VHLSS.

## B. Rethinking Poverty and Poverty Measurement in Vietnam

2.5 Poverty is defined as *unacceptable deprivation in well-being*. But well-being can encompass a multitude of dimensions, and there are many different views about what constitutes an acceptable (or unacceptable) standard of living. In many countries, setting (or revising) the poverty line involves active public debate and a careful balancing of political and scientific considerations. The enormous

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10 The original GSO-WB poverty line was prepared as input to the 2000 “Poverty Assessment Attacking Poverty.”

11 A similar methodology was used in 2005 by a team of local and international experts, led by the Ministry of Labour Invalids and Social Affairs (MOLISA), to update Vietnam’s official poverty lines for the 2006–2010 Socio-economic Development Plan and by MOLISA and GSO more recently to construct official poverty lines for the 2011–2015 Socio-economic Development Plan.

public response, in India and internationally, to the Indian Planning Commission's announcement of new poverty estimates and revised urban and rural poverty lines provides a recent example of the challenges inherent in updating poverty lines, with some interesting parallels to current discussions in Vietnam. Many in India feel that the new official poverty lines are far too low (box 2.1).

**Box 2.1 Do India's New Official Poverty Lines Measure Up?  
What are Lessons for Vietnam?**

The Indian Planning Commission released a new set of poverty estimates and new poverty lines in March 2012. Many observers believe the new poverty lines are much too low—29 rupees per person per day for rural households (just under US\$1.25 2005 Purchasing Power Parity [PPP]) and 32 rupees per person per day for urban households (US\$1.65 2005 PPP). The Planning Commission's new estimates showed a 7-percentage-point drop in poverty, the largest drop since the official poverty rate was first calculated in 1962. The announcement caused a furor in the Indian and international press: Indian poverty lines have always been low by international standards, and the new lines were seen as a missed opportunity to rectify this.

One important criticism is that the nutrition standards embedded even in India's new lines continue to be based on the sparse diet that the poor consumed in the 1973–74 National Sample Survey (NSS). Like in Vietnam, consumption patterns in India have changed substantially since these standards were set. Another criticism is that India's new poverty lines do not “constitute an adequate definition of poverty because they do not take into account malnutrition, sanitation, drinking water, housing and health needs” (Gill 2012). Vietnam's updated 2010 poverty lines take full account of housing, durables, nutrition, clean water and sanitation, and health needs.

If India is using the same methodology it used in the past, why the big controversy now? Over time, the Indian poverty line has increasingly been used as a cut-off to determine eligibility for India's social welfare schemes and targeted poverty reduction programs. People who fall below the poverty line are eligible for a range of social benefits; states receive funds for some poverty reduction programs (for example, the Public Distribution System, which distributes subsidized rice to poor households) according to the number of residents who fall below the official poverty line. So where the poverty line is set is not just a statistical artifact, but an important policy decision that determines the eligibility of millions of families for public support. The Government of India cannot afford a poverty cut-off that is too high, and—as the controversy continues—it appears that the people of India will not accept a poverty cut-off that is too low.

In a recent article in the *Hindustan Times*, Abhijit Banerjee, Ford Foundation International Professor of Economics at MIT, suggested that the way out of the current muddle is to have “two different poverty lines: an ethical poverty line to describe the standard we should aspire to ... and an administrative poverty line which tells us how to best target our limited resources. As [India] gets richer, perhaps the latter will be raised till it is effectively the same as the former. But right now we don't want to hurt the poorest [by spreading resources too thinly] in the name of being more aggressive about poverty” (Banerjee 2011).

*Sources:* Banerjee 2011; Gill 2012.

2.6 Vietnam's official poverty lines for the 2011–2015 Socio-economic Development Plan are more akin to Banerjee's concept of an administrative poverty line: they are designed to help target limited public resources to those most in need, and should be judged by that standard. The updated GSO-WB poverty line better captures what Banerjee refers to as an ethical poverty line; it reflects what Vietnam should aspire to achieve. The good news is that compared to the situation in the 1990s, Vietnam's administrative and monitoring poverty lines are not very far apart. Moreover, the official poverty lines help to target poverty reduction policies and programs to those most in need, and thus help Vietnam achieve its poverty reduction goals.

## Capturing Multiple Dimensions of Poverty

2.7 Measuring poverty is a challenging and complicated task, because poverty itself is complex and has many dimensions. This chapter focuses primarily on conventional approaches, based on absolute poverty lines and consumption measures of welfare. While familiar to the public and policy makers in Vietnam, the standard methodology may not fully capture other important dimensions of well-being. For example, households living in large, prosperous cities like Hanoi or Ho Chi Minh City may have access to better-quality schools and health facilities than households in other regions. But students attending higher-quality schools do not necessarily face higher school fees; in fact, households living in areas with poor schools may have to pay more, for instance, on extra tutoring to compensate for quality differences. Poor households that live in areas with low-quality schools but cannot afford to pay more may be at an additional disadvantage not captured in standard poverty analysis. Similarly, two households that look the same in terms of schooling and skills endowments may not earn the same income if one of the households faces discrimination in hiring—due to ethnicity or gender—that limits future prospects.

2.8 A variety of economic and social factors—some subtle and difficult to capture in standard poverty analysis—must be examined to get a full picture of poverty. Conventional poverty measures provide an important starting point for analyzing other dimensions of poverty. For example, the profile of poverty presented in Chapter 3 looks explicitly at other dimensions of poverty, for example, deprivations in education and skills, poor health status, and deprivations in access to basic services such as clean water and sanitation. The aim of multitopic surveys of living conditions (like the VHLSS) is to facilitate the measurement and analysis of poverty in multiple dimensions. The Human Development Index (HDI) described in Chapter 1 is a composite measure of well-being, as is the new Child Poverty Index (used in Chapter 3) and the broader Multidimensional Poverty Index (MPI) proposed by several UN organizations.

2.9 Additional information on other dimensions of deprivation experienced by the poor can be identified by soliciting their perceptions and insights through discussions and open-ended interviews. A number of Participatory Poverty Assessments (PPAs) have been carried out over the years in Vietnam, including three new field studies carried out in preparation for this report (see Chapter 1). Findings from qualitative studies are included throughout the report. These studies let the poor themselves give voice and context to the story that emerges from more conventional statistical analyses—poor men and women in Vietnam highlight concerns about lack of skills and education, access to good jobs and stable employment, and access to land and job security. They also speak about poverty in terms of risks—linked to health shocks, aging, and disability; job loss and uncertain wages; and weather shocks that destroy crops and affect rural incomes. Many of the poor are highly indebted, and risk can undermine new economic initiatives. The importance of social identity is also evident; in rural areas, minority status was often equated with being poor.

## C. Updating Methods for Measuring Poverty

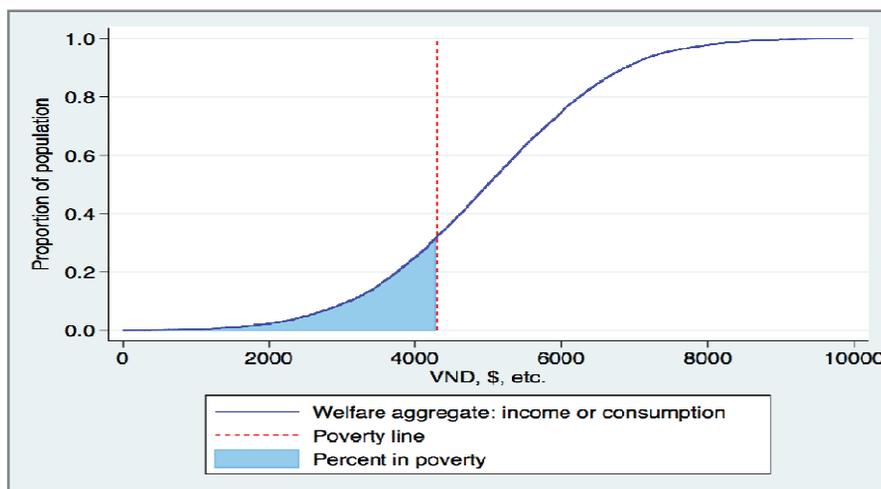
2.10 Two important decisions are required in order to measure poverty: (a) how to measure welfare—in income or expenditure terms, and (b) what poverty threshold or line to use. Both issues have been the subject of debate in Vietnam, among both local researchers and policy makers and in the international community (box 2.2).

2.11 The GSO-WB approach uses per capita expenditures from the VHLSS as a measure of household welfare. The poverty line is constructed using a standard Cost of Basic Needs (CBN) approach, based on the observed consumption behavior of the poor, as reported in the VHLSS. It includes an allowance for food and nonfood spending. The food allowance (or food poverty line) is based on a single reference food basket for poor households, scaled up or down as needed to meet caloric norms and priced using a vector of national food prices. An additional allowance is added for essential nonfood spending, for example, on fuel, housing, schooling, health care, and clothing based on nonfood spending of households whose food spending is equal to the food poverty line (World Bank 1999).

## Box 2.2 How is Poverty Measured?

The poverty rate (or headcount index) is defined as the proportion of the population in a specific period whose welfare (consumption per capita) falls below the poverty line (figure B2.2.1).

**Figure B2.2.1 Conventional Poverty Measurement Methodology**



### Choice of Welfare Indicator

Welfare is typically measured in terms of per capita consumer expenditures or per capita incomes. On a conceptual level, income is a measure of welfare opportunity—the level of well-being a household can afford to purchase at a particular point in time. Consumption can be thought of as a measure of welfare achievement—the level of well-being that a household actually achieves at a point in time. However, incomes are often more variable than expenditures: for example, farmers produce more in years when the weather is good than in years with unseasonable temperatures, droughts, and flooding. Households smooth income variations by saving in good years and dis-saving in bad years. Annual expenditures typically reflect a longer-run concept of income—that is, permanent income—rather than a shorter-run concept of annual income. It is therefore not surprising that income-based poverty statistics can be very different from consumption-based statistics. In the United States, for example, 30 percent of the income-poor own their own home compared to only 15 percent of the consumption-poor, and the food share for the income-poor is only 24 percent compared to 32 percent of the consumption-poor. It is generally assumed that poor households are less likely to own their own home (at least in high-income countries like the United States) and, according to Engel's law, will spend a higher proportion of expenditures on food.

### Defining the Poverty Line

The most commonly used approach to setting poverty lines is the Cost of Basic Needs approach, which is widely applied in countries throughout the world and described in Ravallion (1994, 1998) and Ravallion and Bidani (1994). The Cost of Basic Needs approach consists of first defining a basket of food and nonfood items that are adequate for satisfying basic consumption needs of a household, and then calculating the cost of this basket. Conceptually, a Cost of Basic Needs poverty line measures the minimum income necessary for households to purchase a basic needs basket of food and other commodities, so that members have sufficient food to remain healthy and productive and have the means to participate fully in society. In practical terms, the poverty line is constructed by first defining a reference food basket, reflecting consumption patterns of the poor; and anchoring it in an agreed nutrition norm (for example, 2100 calories per person per day), and then adding an allowance for nonfood spending on essential goods (health care, education, housing, and durables) that is consistent with spending patterns of the poor.

2.12 Vietnam carried out two Living Standards Surveys in the 1990s—the 1992–93 VLSS and the 1997–98 VLSS—with extensive technical support from international partners. Vietnam then carried out a series of government-financed Vietnam Household Living Standards Surveys (VHLSS) (in 2002, 2004, 2006, and 2008) using a similar approach to the earlier VLSS. The design of the core expenditure and income modules of the VHLSS questionnaires were kept broadly consistent with similar modules of the VLSS modules, with the specific and laudable aim of maintaining comparability over time. As noted, comparability has been one of the great strengths of Vietnam’s poverty data.

2.13 But by 2010, strict comparability was coming at too high a cost. The 2010 VHLSS and related welfare aggregates represent a break with the 2002–2008 VHLSS series in three important respects: (a) the 2010 VHLSS was based on a new master sample based on the 2009 Housing and Population Census, including a new set of communes and enumeration areas; (b) the VHLSS household questionnaire was substantially revised (including revisions to the core consumption module) and reduced in length; and (c) an updated methodology was used to construct a more comprehensive consumption (welfare) aggregate. These improvements are summarized here and described in greater detail in Kozel, Hinsdale, and Nguyen (2013).

### The VHLSS was Improved and Shortened in 2010

2.14 **Sampling.** The 2002–08 rounds of the VHLSS used a master sample of communes/urban wards drawn from the 1999 Housing and Population Census. In each round of the VHLSS, half of the enumeration areas (villages) and households within the communes were kept and half replaced, with the aim of ensuring stability in poverty measurement. While good for measurement stability, the 2002–08 master sample was substantially outdated by the end of the period. For example, between 2002 and 2008, there was substantial residential development in erstwhile empty areas (for example, “New City” on the outskirts of Hanoi), and residential growth in provincial cities and towns, but these new developments were not included in the master sample used for 2002–08 rounds of the VHLSS.

2.15 A new master sample of communes and wards was developed for the 2010 and subsequent VHLSSs based on the 15 percent sample of the 2009 Housing and Population Census. Analysis suggests that the new sample provides better coverage of smaller households in urban areas, and somewhat better coverage of migrant households, many of whom come to work in urban areas for extended periods. Previous rounds of the VHLSS have been criticized for poor coverage of urban migrants, who are often assumed to belong to rural sending households (Pincus and Sender 2008). A recent study of poverty in Hanoi and Ho Chi Minh City (Haughton et al. 2010) indicates that many unregistered short-term urban migrants—who are likely to be undersampled in the VHLSS—may be vulnerable and have lower living standards than longer-term residents. These issues will be explored more systematically in the future; the 2012 VHLSS includes a special module on migrants, focusing in particular on long- and short-term migration for work purposes.

2.16 The sample of households for the 2012 VHLSS will be drawn from the same communes as the 2010 VHLSS, similar to the design of the 2002–08 sample. For 2014 and subsequent years, GSO is strongly advised to (a) update the master sample through careful relisting of enumeration areas on a regular basis, and (b) add new communes to the VHLSS master sample over time, with particular attention to good coverage in peri-urban areas where new population growth is occurring. GSO is also encouraged to explore alternative approaches to improve coverage of urban migrants, through either a more comprehensive sampling methodology or in-depth surveys of migrant populations.

2.17 **Questionnaire Design.** The VHLSS has been criticized by some researchers for taking too long to administer in the field, with related concerns about data quality and accuracy. In response to these criticisms, many sections of the 2010 questionnaire were shortened. The consumption modules were redesigned to collect information on food and frequent nonfood spending using a fixed reference period (30 days) rather than a “typical month” (used in 2002–2008), and a decision was made to administer the VHLSS in four rounds during each survey year.<sup>12</sup> Questions designed

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12 The decision to move to a fixed reference period was triggered by difficulties in measuring expenditures and prices during bouts of high inflation (for example, 2008), and an effort to better capture seasonality in consumption patterns.

to collect information on labor earnings also used a fixed reference period (prior month) rather than being based on “typical” work activities. Additional questions were added to capture Vietnam’s expanding array of social insurance and social assistance programs, and were better measures of remittances and transfers. Improvements were also made to the module on access to poverty programs, including targeting and coverage of benefits from targeted poverty reduction programs such as the National Target Program for Sustainable Poverty Reduction.

### **New, more Comprehensive Consumption Aggregates were constructed**

2.18 The first step in estimating a poverty line is to construct a welfare aggregate. The consumption aggregates constructed from the VHLSS follow standard practices well established in the literature (Deaton 1997; Deaton and Zaidi 2002). The consumption aggregates includes (a) food consumption, (b) frequent and infrequent nonfood items (personal care and hygiene, clothing, fuel, household goods), (c) education (tuition, books and uniforms, tutoring, and other fees), (d) health (curative and preventive care, health insurance), and (e) utilities (water, electricity, sanitation and trash collection). Two standard imputations are made in constructing the consumption aggregates, (a) the annual flow of services from durables, and (b) the annual value of housing services/imputed rents.

2.19 The poverty line is defined on the basis of the welfare aggregate. Any changes in the definition of the welfare aggregate will thus require revisions to the poverty line. Different countries use different welfare aggregates for measuring poverty; some countries use income, others use household expenditures. Within countries using household expenditures, there are substantial differences in expenditure aggregates. For example, although many countries include health or education expenditures in the expenditure aggregate, an increasing number of low-income countries in Sub-Saharan Africa do not. If basic health services and primary education services are provided free of charge, they are not captured in household expenditures, however defined, unless imputations are made to value the flow of publically provided services. Instead of trying to value these—which is complicated and controversial—additional analysis can be carried out to measure deprivations in human development, as a complement to income- or expenditure-based measures of deprivation. Many countries, particularly as they become more affluent, include the (imputed) value of durables, housing services, and local amenities in the expenditure aggregate. While broad concepts may be similar—welfare is measured through a household-level expenditure aggregate—the great diversity in actual practice makes it difficult to compare national poverty lines and poverty rates across countries, even when converted into “internationally” comparable 2005 Purchasing Power Parity (PPP) measures. One reason India’s national poverty line is low in PPP terms is because it is based on a very parsimonious welfare aggregate (box 2.1).

2.20 Two different sets of consumption aggregates have been used for poverty analysis in Vietnam. One set of aggregates (referred to as “temporally comparable”) was designed, as the name suggests, to be strictly comparable with the consumption aggregates initially developed using the 1992–93 VLSS. For example, although new durable goods were added to later rounds of the VHLSS (for example, cell phones, computers), only items available in the 1992–93 VLSS are included in the comparable aggregate. Similarly, estimates of the value of housing services are also based on spending patterns in the 1992–93 VLSS. Because Vietnam’s housing market was very underdeveloped in the 1990s, imputed rents were calculated as a fixed percentage of total nonfood consumption rather than derived using conventional hedonic methods. This same fixed percentage (from 1993) was used to calculate the housing component of the consumption aggregate in all subsequent rounds of the VHLSS through 2008.

2.21 The vast majority of research and analytic work using VHLSS data has used the comparable consumption aggregate. The original GSO-WB poverty line, used extensively in the poverty literature for Vietnam, was constructed using the comparable aggregate, and is based on a reference food basket from the 1992–93 VLSS and related spending on a minimum basket of nonfood items, also based on spending patterns of the poor as reported in the 1992–93 VLSS.

2.22 Vietnam today is different from Vietnam in the 1990s, and expenditures, including expenditures of low-income households, are far more diversified. Real estate markets are more developed, particularly in urban areas, and many households put considerable investment into housing and land. Vietnam is similar to other fast-growing economies in this respect. Housing values reported in recent rounds of the VHLSS are more reliable than those collected in earlier rounds.

2.23 A second set of “comprehensive” consumption aggregates was created for the 2004, 2006, 2008, and 2010 rounds of the VHLSS, which aimed to make optimal use of all the expenditure information in a given year, unencumbered by considerations of strict comparability over time. There are a number of minor and major differences between comparable and comprehensive aggregates (see Annex 2.1 for a detailed description). The comprehensive aggregate includes the imputed value for all durables owned by the household and an imputed flow of services from housing. The latter is a particularly important addition (box 2.3).

### **Box 2.3 How to Value Housing Services in the VHLSS**

Housing is an important component of household welfare, particularly as countries grow and prosper. Investments in housing are rising rapidly in Vietnam—families purchase new houses, and build or add onto existing dwelling units. Housing expenditures—either actual or imputed—should be fully reflected in the consumption aggregate. In countries where housing markets function well, annual rental payments provide a good measure of the value of housing services. Using information on reported rents, a hedonic for housing can be used to impute the value of housing services (based on characteristics of the dwelling unit and neighborhood characteristics) in cases where information on rents is missing (for example, owner-occupied housing, housing supplied by employers).

However, Vietnam is an unusual case; rental markets are still thin and there are not enough renters either in early or more recent rounds of the VHLSS to estimate robust hedonic rent equations. Even the 2010 VHLSS includes only 243 households (out of 9,399) who report spending on rents—around 2.6 percent of total households in the sample. In contrast, the 2009 Housing and Population Census reports that 6.4 percent of all households in Vietnam rent their dwelling unit, including 13.2 percent of households living in urban areas.

Prior to 2010, the value of housing services was assumed to be a fixed percentage of nonfood consumption expenditures. Based on shares in 1992–93, the value of housing was set equal to 11.8 percent of nonfood consumption for rural households and 21.4 percent for urban households.

In constructing comprehensive aggregates, each household’s annual consumption of housing services is calculated as a fixed share of the reported sales value of the dwelling unit. This fixed share is the same for all households and equals 2.88 percent, which is the median ratio of reported annual rent payments to reported dwelling sales value, among the subsample of households who report renting their dwelling. In essence, this method uses the information collected in the 2010 VHLSS about Vietnam’s rental market to approximate the relationship that prevails in Vietnam between rental and ownership values in housing, and then imputes annual consumption of housing services for all households using this relationship. While this method would not be preferable to hedonic estimation given a more comprehensive survey of Vietnam’s renters, it has the virtue of not assuming that a household’s consumption of housing remains a constant proportion of other nonfood consumption over time, an assumption made in the temporally comparable set of aggregates from 1993 to 2008. Derived directly from the reported value of each household’s dwelling, the measure of housing consumption in the comprehensive aggregates is more sensitive to what each household reports about its living situation. The result is that, in 2010, housing averaged 15 percent of total consumption in the comprehensive aggregates compared to 6 percent in the temporally comparable aggregates (table 2.1). Note, however, that the share of housing is much lower for households in the poorest quintile (7.5 percent) and thus does not have a large impact on 2010 poverty rates.

Source: Kozel, Hinsdale, and Nguyen 2013.

2.24 Tables 2.1 and 2.2 present comparable and comprehensive consumption aggregates for the last four rounds of the VHLSS.<sup>12</sup> By 2010, it was clear that the benefits of maintaining procedural consistency with 1993 consumption aggregates was substantially outweighed by the resulting loss of information; there is a large and growing gap between the temporally comparable and comprehensive aggregates over time. Going forward, it is recommended that the methodology for estimating consumption aggregates and poverty lines be updated on a more frequent basis. How frequently will depend on Vietnam's rate of economic progress and how quickly consumption patterns are changing, particularly changes at the lower end of the income distribution, where there is a trade-off between stability and consistency over time and relevance of the methodology to contemporary living conditions. Given how quickly conditions are changing globally and in Vietnam, it is suggested that the methodology be revisited in five (or six) years to assess whether it is providing accurate estimates. Note, however, that despite efforts to ensure procedural consistency, comparisons between the 2010 VHLSS and earlier years using *either* comparable or comprehensive consumption aggregates must be interpreted with care. As described above, a number of important changes were introduced in the 2010 VHLSS, such as an updated sample frame, a shift to a fixed reference period in the expenditure module, and a revised definition of welfare, which make comparisons difficult. The 2010 VHLSS and the new GSO-WB poverty lines provide a baseline for consistent poverty monitoring going forward, that is, for the 2012 and future rounds of the VHLSS.

**Table 2.1 Comprehensive Consumption Aggregates for the VHLSS 2004, 2006, 2008, 2010**

Expenditure component	Mean consumption				Average share of total consumption			
	2004	2006	2008	2010	2004	2006	2008	2010
Food expenditure	1,753	2,378	2,993	6,515	42	42	38	46
Non-food expenditure	1,050	1,449	2,142	3,220	21	21	22	20
Durables consumption	592	767	1,301	1,972	10	10	12	10
Education expenditure	261	334	461	769	5	5	5	4
Health expenditure	297	339	494	722	6	5	5	4
Utilities and electricity	140	183	233	373	3	3	2	2
Housing consumption	1,120	1,390	2,070	3,558	15	15	16	15
<b>Total expenditure</b>	<b>5,212</b>	<b>6,840</b>	<b>9,694</b>	<b>17,129</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Source: 2004, 2006, 2008, 2010 VHLSS.

**Table 2.2 Temporally Comparable Consumption Aggregates for VHLSS 2004, 2006, 2008, 2010**

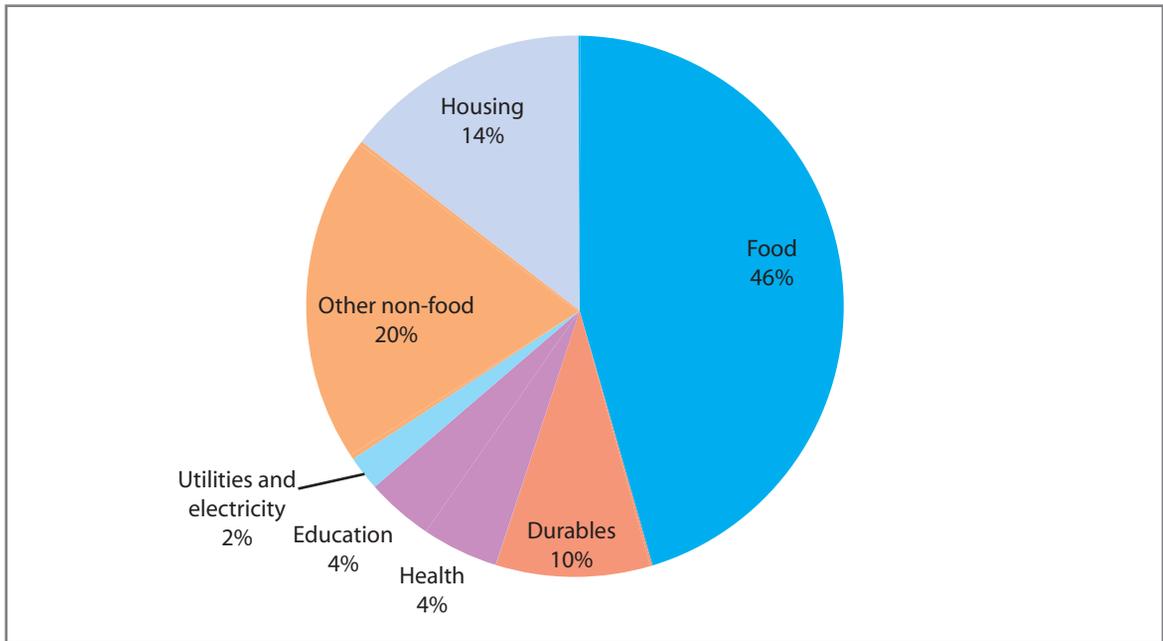
Source: 2004, 2006, 2008, 2010 VHLSS.

Expenditure component	Mean consumption				Average share of total consumption			
	2004	2006	2008	2010	2004	2006	2008	2010
Food expenditure	1,857	2,502	3,153	6,401	49	49	47	54
Non-food expenditure	986	1,396	1,987	2,975	20	21	23	21
Durables consumption	518	638	801	1,268	10	9	9	7
Education expenditure	246	330	423	732	5	5	5	5
Health expenditure	290	332	465	680	6	5	6	5
Utilities and electricity	147	191	233	378	3	3	3	3
Housing consumption	351	466	622	988	6	6	7	6
<b>Total expenditure</b>	<b>4,394</b>	<b>5,855</b>	<b>7,683</b>	<b>13,422</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

2.25 Figure 2.1 shows the overall composition of per capita expenditures in the 2010 VHLSS. Spending on food now constitutes less than half of per capita expenditures compared to 57 percent in 1998, and durables and housing make up nearly a quarter of aggregate welfare.

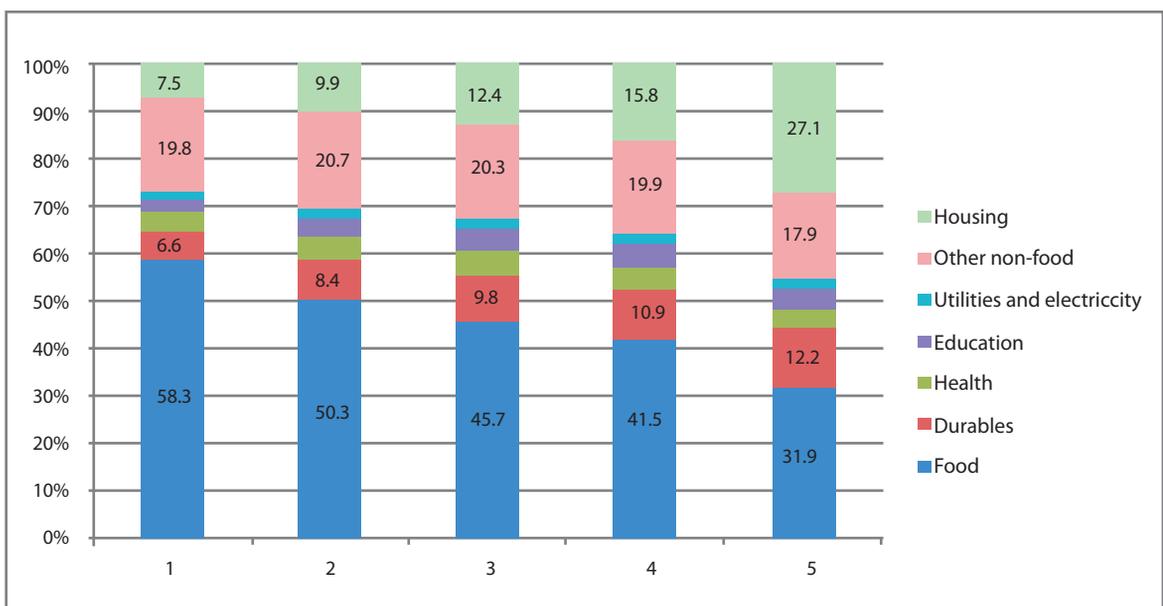
13 These aggregates are in real terms; they have been adjusted to January terms of the survey year and for regional cost-of-living differences.

**Figure 2.1 Composition of Per Capita Expenditures, 2010 VHLSS**



2.26 Figure 2.2 shows the composition of expenditures, categorized by food, nonfood, durables, housing, and others—broken down by per capita expenditure quintile. Note that the food share falls from 58 percent (in the poorest quintile) to only 32 percent for the wealthiest quintile. In contrast, the poorest individuals spend only 7 percent of their total expenditures on housing and another 7 percent on durables compared to a housing share of 27 percent and a durable share of 12 percent for the wealthiest group of individuals. These gradients are consistent with those of other countries at similar levels of development.

**Figure 2.2 Composition of Per Capita Expenditures by Per Capita Expenditure Quintile, 2010 VHLSS**



## Consumption is adjusted for Household Size to Estimate Individual Welfare

2.27 Our objective is to calculate a measure of individual welfare and estimate the number of people who live below the poverty line. But in households, individuals live together, eat together, and often pool their resources. Household surveys like the VHLSS measure expenditures at the household rather than individual level. Different approaches have been used to move from household-level expenditures to individual welfare. One approach is to use equivalence scales and to also adjust for household-level economies of scale. In the absence of a well-defined equivalence scale for Vietnam, and building on past practices, household expenditure is converted into per capita terms by simply dividing by household size. The implications of using alternative measures, adjusting for adult equivalencies and household economies of scale, on the poverty profile are discussed briefly in Chapter 3.

## Consumption is also Adjusted for Temporal and Spatial Cost Variations

2.28 One of the advantages of the CBN methodology is that it anchors the poverty line at a fixed level of well-being, and consequently allows for consistent poverty comparisons. However, households living in different regions of the country may face different prices for similar consumer goods due to differences in transport, storage, and marketing costs. For example, consumers pay more per kilogram to purchase rice in a market in Ho Chi Minh City than they pay to purchase the same quality of rice in a rural district in the Mekong Delta, where the rice is grown. In contrast, laundry soap may cost more in rural areas than in cities, where it is produced and packaged. Prices also change over time due to inflation and other factors.

2.29 Some countries (for example, Indonesia and Mozambique) account for inflation and spatial cost-of-living differences by constructing poverty lines for different regions, based on region-specific prices and (sometimes) region-specific consumption baskets. In keeping with past practice, a single national GSO-WB poverty line was constructed using information from the 2010 VHLSS. The new GSO-WB poverty line is applied to spatially and temporally adjusted (that is, real) per capita expenditures to calculate poverty rates.

2.30 Temporal adjustments are straightforward; the consumption aggregates described in table 2.1 have been deflated to January of each survey year (for example, 2004, 2006, 2008, 2010) using the GSO's official Consumer Price Index (CPI) deflators for rice, other foods, and nonfoods. Previous to 2010, spatial adjustments were made using regional CPI deflators provided by the GSO. For 2010, new spatial cost-of-living indexes (SCOLIs) were estimated and are used instead of regional CPI deflators to calculate poverty rates.

2.31 There are three reasons why prices collected for the CPI are not well-suited to measuring spatial differences in the cost of living. First, CPI prices are collected on a frequent basis in outlets where a wide range of consumer goods are available and shopping volumes are high. These are typically located in urban and peri-urban areas. But many of the rural population (including poor households) shop in local markets near where they live. Second, the specification of items whose prices are collected for the CPI is not the same across provinces. Vietnam's CPI price collection system maintains temporal consistency (prices for the same items are collected over time in each location) but not spatial consistency (the items in the basket may be slightly different in each location). For example, prices of higher-end cotton shirts may be surveyed in large urban areas, while prices for lower-cost polyester shirts are surveyed in smaller towns or rural areas. Regional variations in the specification of items may reflect quality differences rather than only capturing price differences for an identical good. Third, a CPI and SCOLI have different objectives, and the differences make it difficult for the two indexes to rely on the same set of price data. The CPI aims to give equal weight to every Vietnamese dong spent; it is used as a deflator to ensure the real value of currency remains unchanged. Consequently the expenditure patterns of wealthier households have more weight in a CPI because they spend more money, and the CPI price collection system targets outlets with a high volume of purchases.

2.32 In contrast, a SCOLI is population-weighted rather VND-weighted; the SCOLI is estimated using the prices paid by the average individual from each area, and prices are aggregated into a population-weighted index that treats everyone equally. In short, compared to the CPI, a SCOLI requires different budget shares for aggregating items into an index, a different set of outlets for price collection, and different weights to aggregate information on individuals to form regional averages.

2.33 Regional adjustments were based on regional CPI indexes in earlier rounds of the VHLSS. However, for 2010, adjustments were made for regional cost-of-living differences using market price data from a SCOLI fielded in conjunction with the second and third rounds of the 2010 VHLSS. The approach is described in Annex 2.2.

2.34 The 2010 SCOLI ranges between 0.7 and 1.0 (table 2.3). The Mekong Delta has the lowest overall cost of living and the Red River Delta (which is also the base region) has the highest cost of living. In all but two of the six regions, the SCOLI shows only a small difference in the cost of living between urban and rural sectors. The two exceptions are the Red River and South East regions, where the urban cost of living is approximately 20 percent higher than the rural cost of living, largely reflecting the higher estimated cost of accommodation services in the metropolitan areas of Hanoi and Ho Chi Minh City. Apart from these two exceptions, the variation in the cost of living is greater across regions than it is between the urban and rural sectors within a region.

**Table 2.3 Spatial Cost-of-Living Index (SCOLI) for each Region and Sector**

Region	Urban Households	Rural Households
Red River	1.00	0.79
Midlands & Northern Mountains	0.81	0.79
Northern & Central Coast	0.78	0.71
Central Highlands	0.83	0.78
South East	0.97	0.77
Mekong Delta	0.74	0.70

*Note:* Calculations are based on a Törnqvist index applied to regional average prices that are pooled over the two rounds of SCOLI data collection, and using person-weighted average budget shares, with housing values based on the hypothetical values reported by all survey respondents.

## D. Constructing a new GSO-WB Poverty Line

2.35 The poverty line consists of two components, a food poverty line and an additional allocation to account for essential nonfood needs. The food poverty line is estimated in three steps. First, a reference food basket is defined that reflects the consumption patterns of the poor; second, quantities are adjusted to reach an agreed nutrition norm; and third, the cost of purchasing the adjusted reference basket is calculated. An allowance for essential nonfood needs is estimated using an Engel's curve regression and is then added to the food poverty line in order to construct the total poverty line.

### Defining the Reference Food Basket

2.36 The reference food basket used to construct the original GSO-WB poverty line is anchored in the food consumption patterns of poor households<sup>14</sup> in the 1993 VLSS. The reference food basket for the updated GSO-WB poverty line is anchored in food consumption patterns of poor households in the 2010 VHLSS.

<sup>14</sup> The methodology is described in Annex 2 of the 2000 "Vietnam Development Report: Attacking Poverty." (World Bank 1999). Food consumption of the 3rd quintile of households, ranked nationally based on per capita expenditures, was used to construct the reference food basket.

2.37 Defining the reference basket is an iterative process; we do not know in advance which households are poor (the method is described in Pradhan et al. 2001)<sup>15</sup>. Households were ranked according to SCOLI-adjusted and temporally adjusted per capita expenditures (henceforth referred to as “real” per capita expenditures) from least well-off to most well-off, and the poor were initially defined as those in the bottom 2.5 percent to 20 percent of the real per capita expenditure distribution. This initial reference basket ultimately became the final reference basket; the 2010 poverty rate, based on an updated GSO-WB poverty line, was close to 20 percent.

2.38 Analyses were carried out to assess the stability of the poverty line food basket across different reference groups; food consumption patterns of the bottom 2.5 to 20 percent (bottom quintile) of individuals were compared with the bottom 2.5 to 10 percent (bottom decile). The initial 2.5 to 20 percent reference group was further divided to compare (a) food baskets for bottom-quintile ethnic minorities and bottom-quintile majorities, and (b) food baskets for bottom-quintile urban and bottom-quintile rural households (Annex table 2.1).

2.39 Food consumption patterns were similar when comparing the poorest 10 percent and the poorest 20 percent of the population. Similarly, the consumption patterns of poor minority households were on average quite similar to consumption patterns of poor majority households. Dietary patterns, however, were different for urban and rural households in the 2.5 to 20 percent reference group: urban poor households consumed less rice and higher-priced calories (meats, oils), and were more likely to consume food and drinks outside the home. Although the GSO-WB poverty line is based on a single national reference basket for poor households, Vietnam’s official poverty lines use different reference baskets for urban and rural households. A number of other countries, including, for example, Indonesia, Mozambique, Papua New Guinea, and Russia, define regional reference baskets that reflect local preferences and tastes. The problem with using different reference baskets, particularly for urban and rural areas, is that the different baskets often reflect diets of different quality, so the poverty line for urban areas (based on consumption patterns of urban households) may give a superior standard of living compared to the poverty line for rural areas (based on consumption patterns of rural households). In 2010, only a small fraction (9 percent) of the poor reference group actually lived in urban areas. Given this, coupled with concerns about avoiding quality differences (that is, setting a higher standard of living for urban households), a single national reference food basket was again used to construct the new GSO-WB poverty line.

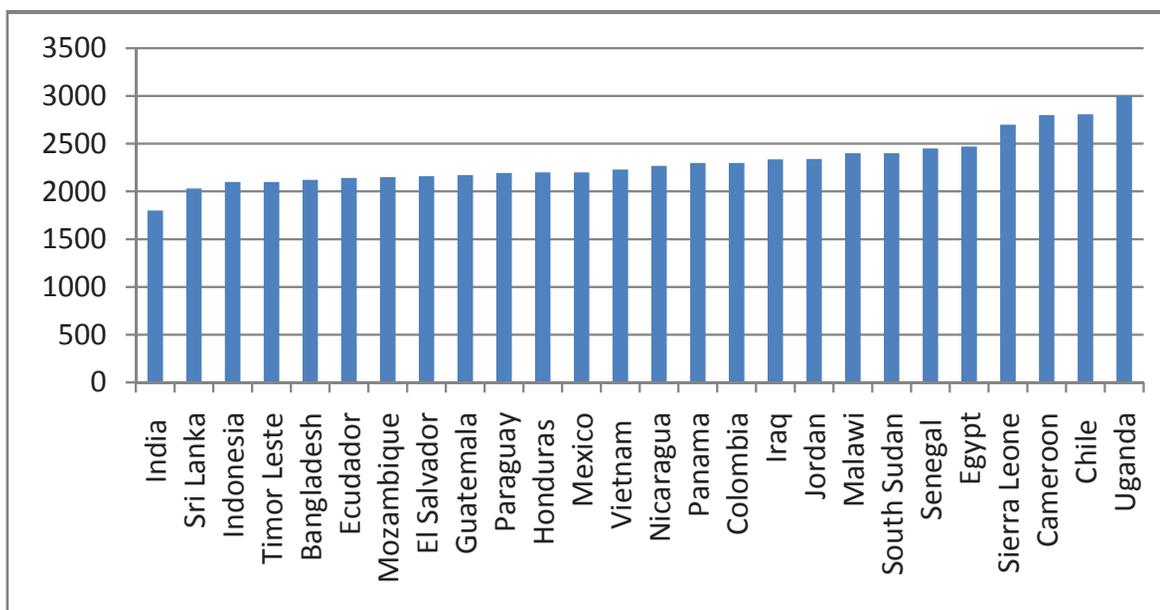
2.40 In line with standard CBN practice, food quantities in the reference basket are scaled up to an “acceptable” nutritional norm, holding constant the relative composition of the reference basket (that is, all quantities are scaled up by the same factor). But what constitutes an acceptable norm? International experience shows that countries anchor their poverty lines in very different caloric norms, ranging from a low of 1,800 Kcals for India (GOI 2009) to more than 2,700 Kcals for some countries in Africa.

2.41 The original GSO-WB poverty line was anchored in a caloric norm of 2,100 Kcals per person per day. However, the composition of the Vietnamese population has changed since the early 1990s, when the 2,100 Kcals norm was set. The share of young children in the population (who consume less food) has decreased and the share of adults (who consume more) has increased. A new caloric norm of 2,230 Kcals per person per day was estimated using age- and gender-specific caloric requirements for the Vietnamese population developed by the Nutrition Institute in the Ministry of Health (MOH 2006), and weighted by the relevant age-gender composition of the national population in the 2010 VHLSS. These new norms compare well with international practice (figure 2.3).

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15 We restrict the group to the bottom 2.5 percent to 20 percent to avoid potential problems with outliers and measurement error.

**Figure 2.3 Nutrition Norms Used to Anchor Poverty Lines in Different Countries**



Sources: UN Statistics Division 2005; World Bank staff estimates.

2.42 Table 2.4 compares the calorie and expenditure composition of the 1993 reference food basket used to estimate the original GSO-WB poverty line with the new food basket use to construct the 2010 GSO-WB poverty line. The original food reference basket was heavily dominated by rice (79 percent of calories, 46 percent of food spending). The 2010 basket is more diversified; although rice continues to be important in the food consumption of the poor (66 percent of calories, 30 percent of food spending), their consumption patterns have become more diversified to include, for instance, pork and other meats and seafood, vegetables and fruits, more oils, and more calories from meals eaten outside the household. Rice calories are very cheap; calories from pork, oils, and seafood are more expensive. The cost of the 2010 reference basket will be higher than the original 1993 reference basket. In addition, there has been a substantial increase in the non-quantified share of consumption, that is, food reported under “other” categories and meals eaten outside the household. More than 95 percent of food consumption was recorded under quantified items in the 1998 VLSS compared to less than 80 percent in the 2010 VHLSS. An extended list of food items was included in the 2012 VHLSS, with the aim of getting better (more quantified) measures of food consumption (table 2.4).

**Table 2.4 Composition of the Reference Food Basket, 1993 and 2010 VHLSS**

Food item	1993		2010	
	Average share of total calories	Average share of total food expenditure	Average share of total calories	Average share of total food expenditure
Plain rice (including fragrant and specialty rice)	78.9	46.5	66.4	30.5
Sticky rice	2.7	2.3	4.2	2.5
Maize (in seed equivalent)	1.0	0.4	1.6	0.4
Cassava (in fresh-type equivalent)	1.9	0.9	1.0	0.3
Potato of various kinds (in fresh-type equivalent)	1.6	2.5	0.3	0.3
Wheat grains, bread, wheat powder	0.3	0.4	0.3	0.3
Flour noodle, instant rice noodle/porridge	0.3	0.7	1.3	1.6
Fresh rice noodle, dried rice noodle			0.4	0.5
Vermicelli			0.1	0.2
Pork (in equivalent of the pork type with removed fat)	2.4	9.3	4.0	11.1
Beef			0.1	0.8
Buffalo meat	0.0	0.5	0.0	0.2
Chicken meat	0.7	5.1	0.9	5.1
Duck and other poultry meat	0.1	0.7	0.2	1.0
Other types of meat			0.0	0.3
Processed meat			0.1	0.6
Lard, cooking oil	1.8	1.5	4.2	2.5
Fresh shrimp, fish	1.3	8.3	1.4	6.9
Dried and processed shrimps, fish			0.3	1.2
Other aquatic products and seafood (crabs, snails,...)			0.1	0.5
Eggs of chickens, ducks, Muscovy ducks, geese	0.0	0.3	0.7	1.7
Tofu	0.4	0.9	0.6	1.3
Peanuts, sesame	0.7	0.8	0.5	0.4
Beans of various kinds	0.4	0.6	0.3	0.3
Fresh peas of various kinds			0.1	0.4
Morning glory vegetables	0.6	2.2	0.5	1.1
Kohlrabi	0.3	1.0	0.1	0.2
Cabbage	0.2	1.0	0.1	0.4
Tomato	0.1	0.7	0.0	0.4
Other vegetables			0.7	3.3
Orange	0.0	0.2	0.0	0.2
Banana	0.7	1.2	0.6	0.6
Mango	0.0	0.3	0.0	0.2
Other fruits			0.4	1.5
Fish sauce	0.3	2.0	0.2	1.1
Salt	0.0	0.5	0.0	0.3
MSG	0.0	0.8	0.0	0.3
Glutamate			0.0	1.3
Sugar, molasses	1.3	1.3	1.3	1.2
Confectionery			0.6	1.0
Condensed milk, milk powder	0.0	0.1	0.2	0.7
Ice cream, yoghurt			0.0	0.2
Fresh milk			0.1	0.5
Alcohol of various kinds			1.3	1.8
Beer of various kinds	0.8	0.9	0.1	0.3
Bottled, canned, boxed beverages			0.1	0.2
Instant coffee			0.0	0.2
Coffee powder			0.0	0.1
Instant tea powder			0.0	0.1
Other dried tea	1.0	6.3	0.4	1.1
Tobacco			0.0	2.3
Betel leaves, areca nuts, lime, betel pieces			0.0	0.1
Outdoors meals and drinks			3.3	5.9
Other food and drinks			1.0	2.6

## Calculating the Food Poverty Line

2.43 The food portion of the CBN poverty lines is defined as the cost of purchasing the (scaled) reference food basket. There are three sources for food prices that could be used to estimate the food portion of the poverty line: (a) unit values (reported value of food consumption divided by reported quantities) calculated from the 2010 VHLSS survey, (b) food prices collected by the GSO Price Department for the CPI, and (c) food prices collected through the SCOLI survey.

2.44 The original GSO-WB food poverty line was based on CPI food prices provided by the Price Department. However, Vietnam's new official poverty lines are calculated using unit values from the 2006 VHLSS and adjusted for inflation. Both the SCOLI and CPI prices cover only a subset of food items in the 2010 VHLSS. Unit values (real or imputed in the case of non-quantified consumption) are available for all food items in the VHLSS and, moreover, can be estimated specifically for low-income households, thus reflecting what the poor actually purchase (quality, brand) and what they pay. There are mixed views in the literature (Deaton 1988, 1997; Deaton and Tarozzi 2005) about whether unit values are adequately well specified to be used as prices. Even well-defined items in the household consumption module, such as rice, are available in a range of qualities, and prices vary between urban and rural areas and among regions. Limiting unit values to a group of poor households will help control for quality differences, which are usually linked to income levels (for example, wealthier households tend to purchase higher-quality/more expensive rice).

2.45 Consistent with the methodology used to estimate Vietnam's official poverty lines, the new GSO-WB food poverty line is calculated using mean unit values for food purchases by poorer households (bottom 2.5 to 20 percent) reported in the 2010 VHLSS. National food poverty lines are estimated for each round of the 2010 VHLSS (June, October, December) using the national reference food basket and food prices (unit values) from each round, and adjusted for inflation and averaged to construct a national food poverty line in January 2010 VND.

2.46 The new GSO-WB food poverty line for 2010 is VND 343,000 per person per month (VND 4,116,000 per person per year).

## Calculating the Total Poverty Line, including Food and Essential Nonfood Spending

2.47 In addition to food, an allowance must be added for essential nonfood spending such as for fuel, housing, schooling, health care, clothing, and other daily needs. However, estimating the nonfood component of the poverty line is not as straightforward as estimating the food poverty line, because there is no easily defined "norm" for nonfood expenditures in the way that caloric norms can be used to define food needs.

2.48 The CBN approach looks to the actual expenditure patterns of the poor in the 2010 VHLSS with the aim of estimating (a) an "austere" allowance for nonfood needs, based on the typical value of nonfood spending by households whose total expenditure just equals the cost of the food poverty line; and (b) "minimal but adequate" allowance for nonfood needs, based on the typical value of nonfood spending by households whose food spending actually reaches the cost of the food poverty line, so that basic food needs are fully met.

2.49 An Engel curve looks at the relationship between the share of spending on food and total per capita expenditures. According to Engel's law, the food share decreases as expenditures (welfare) rise. The average food share for each group of households can be calculated using an Engel curve regression (Ravallion and Bidani 1994) as follows:

$$\frac{f(y_i)}{y_i} = \alpha + \beta_1 \log\left(\frac{y_i}{bf}\right) + \gamma'(d_t - \bar{d}) + residual_i$$

where  $\frac{f(y_i)}{y_i}$  is the food budget share,  $\alpha$  is a national intercept,  $\left(\frac{y_i}{bf}\right)$  is total (nominal) expenditure divided by the food poverty line, and  $d_t$  is a vector of demographics with mean  $\bar{d}$ .

2.50 In keeping with international practice, we propose to use the upper-bound poverty line (that is, with "minimal but adequate" allowance for nonfood) as the new GSO-WB poverty line, which is thus

defined as the food poverty line divided by Engel's coefficient estimated from the regression  $(.525)^{16}$ :

$$\frac{b^f}{\alpha^*}$$

The new poverty line assumes the nonfood spending of a typical household at the point on the Engel curve where actual food expenditure is equal to the food poverty line.

2.51 The new GSO-WB poverty line is therefore defined as:

**VND 653,000 per person/month**, which equals VND 343,000 (food poverty line)  $/ .525$ .

## E. New Poverty Estimates for 2010: GSO-WB and Official Poverty Methodologies

2.52 New poverty estimates based on the new GSO-WB poverty lines and consumption aggregates described in this chapter are presented in table 2.5. For purposes of comparison, the table also presents Vietnam's official household-level poverty estimates for 2010,<sup>17</sup> based on official poverty lines of VND 400,000 person/month (rural) and VND 500,000 person/month (urban). The GSO-WB poverty rates are higher overall—20.7 percent compared to 14.2 percent—which is not surprising because the GSO-WB poverty line (VND 653,000 person/month) is higher than the official poverty lines. Comparing the two estimates for 2010, official estimates suggest higher rates of poverty in the North Central and South Central coastal regions compared to GSO-WB estimates, and slightly lower rates in the Central Highlands and Southeast region. Differences in poverty estimates for the Southeast primarily reflect the fact that the SCOLI measured a higher cost of living in the Southeast compared to the CPI-based regional deflator. Overall, the GSO-WB estimates suggest lower poverty rates in urban areas than official estimates.

**Table 2.5 Poverty Estimates for 2010: Comparing the GSO-WB Methodology and Official Methodology**

	GSO-WB Poverty Rate		Official Poverty Rate	
	Incidence (%)	Contribution to total (%)	Incidence (%)	Contribution to total (%)
<b>All Vietnam (national)</b>	20.7	100	14.2	100
<b>Urban</b>	6.0	9	6.9	14
<b>Rural</b>	27.0	91	17.4	86
Red River Delta (Hanoi)	11.4	12	8.4	13
East Northern Mountains	37.7	21	24.2	20
West Northern Mountains	60.1	9	39.4	9
North Central Coast	28.4	16	24.0	20
South Central Coast	18.1	7	16.9	10
Central Highlands	32.8	10	22.2	9
Southeast (HCMC)	8.6	7	3.4	4
Mekong Delta	18.7	17	12.6	17

16 Where  $\alpha^*$  is defined as  $\alpha^* = \alpha + \beta \log(1/\alpha)$ .

17 Official estimates reflect the number of households on the poverty list and not the number of individuals on the poverty list. To the extent that poor households are larger on average than nonpoor households, official estimates of the share of individuals below the poverty line would be higher than the share of households.

18 Each round of the VHLSS includes around 46,000 households. Detailed information on household income is collected for all households, but consumption information is collected for only 20 percent of households (three in each enumeration area), or 9,400 households in total. Only unit record data from the 20 percent sample (income + consumption) are released to the public.

2.53 Although the methodologies are broadly similar (both use a CBN approach based on spending behavior of the poor in the VHLSS), the new GSO-WB poverty line is higher than official lines for the following reasons:

- Official lines were finalized in late 2010, before the 2010 VHLSS data were available and are thus based on a food reference basket and consumption behavior of poor households in the 2006 VHLSS. As noted, the 2010 VHLSS is different from the 2006 VHLSS in a number of important respects, including sampling and design of the questionnaire.
- Official poverty lines were estimated using the temporally comparable consumption aggregates rather than comprehensive consumption aggregates. As demonstrated in table 2.1, the comprehensive aggregate is higher due especially to the inclusion of more types of durable goods and, most importantly, a better measure of the value of housing services. But using the new measure of housing services does not in itself lead to a higher poverty rate. We tested a modified comprehensive consumption aggregate that included a value of housing calculated using the original GSO-WB method, and then calculated new poverty lines and poverty rates. The “old housing method” poverty rate was 21.3 percent, slightly higher than the “new housing method” poverty rate.
- Although food poverty lines are similar in the official and GSO-WB approaches, a decision was made to use a lower allocation for essential nonfood spending for the official poverty lines than indicated in the VHLSS data (see discussion in Chapter 1).

2.54 There are other important differences between the two methodologies that might result in different poverty rates in the aggregate and across regions. For example:

- Official poverty rates for 2010 were calculated on the basis of per capita incomes in the full VHLSS,<sup>19</sup> with some adjustments at provincial levels following discussions with MOLISA. As described in box 2.2, income-based poverty estimates are typically different (and yield a different poverty profile) than consumption-based estimates.
- Income-based poverty rates were adjusted for spatial cost-of-living differences using a CPI-based regional deflator rather than the SCOLI. Consumption-based poverty rates were re-estimated using CPI-based spatial cost-of-living adjustments instead of the SCOLI. The impact was small and worked to raise the poverty rate (to 21.5 percent) rather than lower it.

2.55 Neither set of lines is inherently better than the other. As noted in Chapter 1, they are designed to serve different purposes. The strength of the GSO-WB approach lies in consistent poverty monitoring and its independence from budgetary or political considerations. In contrast, Vietnam’s official poverty lines are primarily intended to help set targets and related resource allocations for targeted poverty reduction programs and policies under Vietnam’s 2011–2015 Socio-Economic Development Plan. In this sense, they are administrative lines, necessarily constrained by resource availability. In response to a new directive on social protection (Resolution 15), MOLISA is developing new measures of average and minimum living standards, which will be used to identify potential beneficiaries of social assistance and social insurance policies and programs.

2.56 Official lines were used in carrying out the 2010 Poverty Census in Vietnam. Local surveys were used to identify poor and near-poor households (using short forms, proxy-means-test scorecards, and short income questionnaires), combined with village-level discussions to determine which households had incomes below the official poverty lines and were eligible to be on the poor list (Prime Minister’s Directive No. 1752/CT-TTg). These lists are being updated annually, again using a mix of survey methods and village-level discussions, often applied differently across the 10,000 or so communes in Vietnam. Analysis suggests that many of those included on the lists are poor, but not all poor households are included on the list (Chapter 3). In short, errors of exclusion are a greater concern than errors of inclusion.

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<sup>19</sup> Each round of the VHLSS includes around 46,000 households. Detailed information on household income is collected for all households, but consumption information is collected for only 20 percent of households (three in each enumeration area), or 9,400 households in total. Only unit record data from the 20 percent sample (income + consumption) are released to the public.

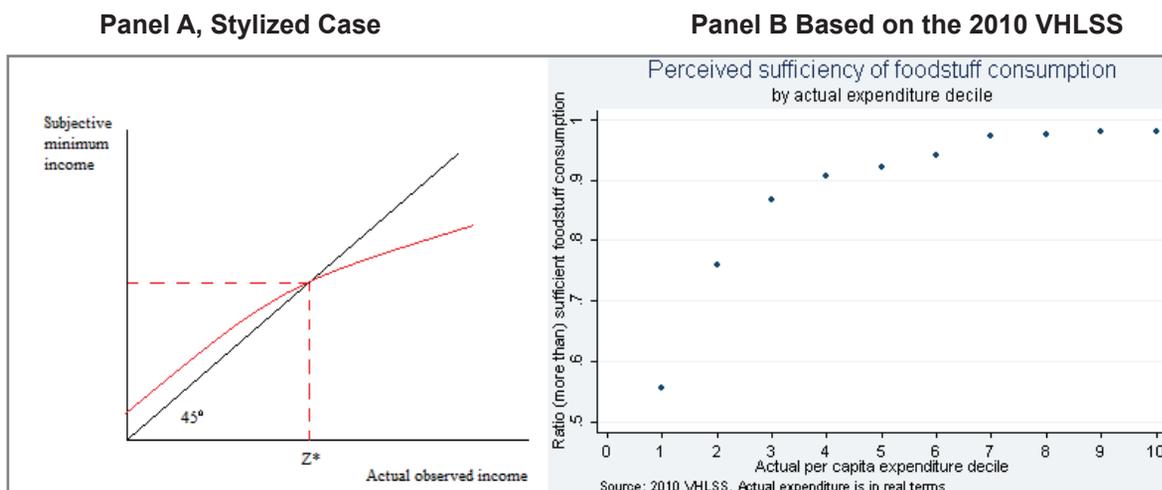
## F. Are the New GSO-WB Poverty Lines too High? Are They Consistent with Citizens' Subjective Views?

2.57 An alternative methodology for estimating subjective poverty lines that has received growing attention in the literature (Kapteyn 1994; Ravallion 2012; Ravallion and Lokshin 2002) was also applied in Vietnam based on additional questions added to the 2010 VHLSS to elicit households' own assessment of whether their consumption of important items, such as foods, foodstuffs, electricity, water, clothing, and housing, was sufficient to meet their needs. (See Annex 2.3 for technical details, and Marra 2012.) For example, the following question was intended to assess adequacy of food (for example, rice, basic food grains, and staples) and foodstuffs (for example, meats, vegetables, condiments):

<b>11. Has consumption of food and foodstuff by your household [...] been sufficient to meet needs over the last 30 days?</b>			
Insufficient .....	1	<input type="checkbox"/>	Food
Sufficient .....	2	<input type="checkbox"/>	Foodstuff
More than sufficient .....	3		
No comment/ no applicable .....	4		
<b>Sufficient' means having met your household's minimum consumption needs.</b>			

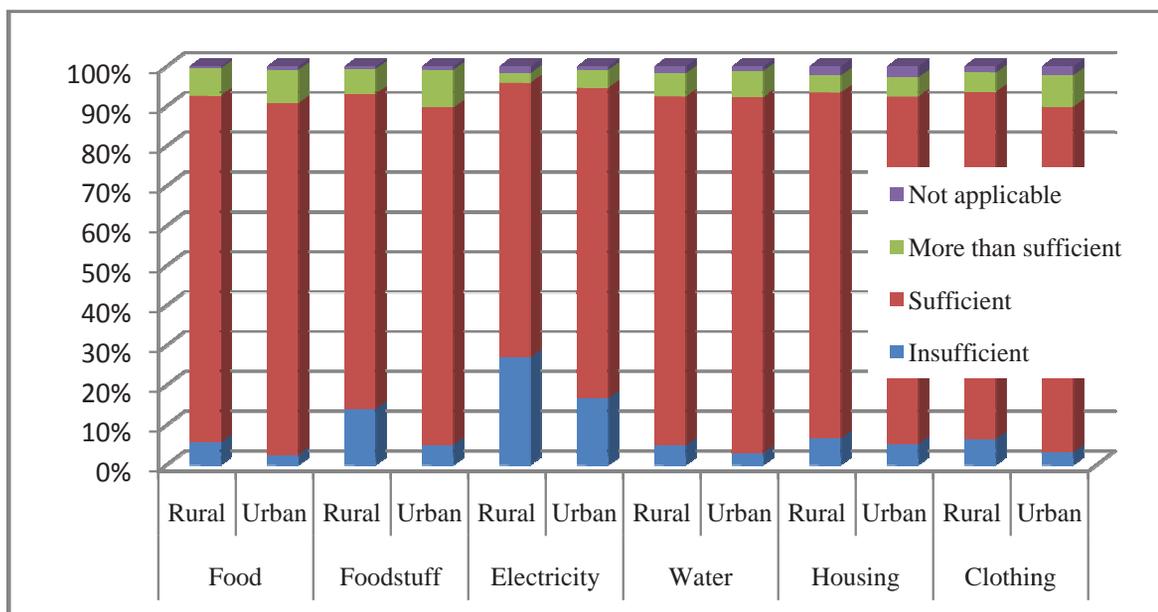
2.58 The intuition behind subjective poverty lines is straightforward: households whose observed incomes are above the subjective poverty line (that is, marked in red in figure 2.4, panel A) feel they have enough or more than enough income to meet their needs, while households with observed incomes below the subjective line consider their incomes inadequate to meet their needs. The approach used here is slightly different and is based on perceptions of the adequacy of specific items, for example, foodstuffs. In the case of foodstuffs, panel B shows that, in 2010, poorer households (deciles 1 and 2) were much less likely than better-off households to say their consumption of foodstuffs was sufficient.

**Figure 2.4 Measuring Subjective Poverty**



2.59 Overall, responses to these questions suggest that less than 5 percent of the households in the 2010 VHLSS felt they had consumed insufficient amounts of food in the 30 days preceding the survey. Acute hunger is no longer a major issue for Vietnam. However, 11.5 percent of households indicated insufficient consumption of foodstuffs, and the percentage was significantly higher in rural than in urban areas—14 percent compared to 5 percent (figure 2.5). A surprisingly high percentage of households (25 percent in rural areas) reported they were not able to consume sufficient electricity in the 30 days before the survey. This almost certainly reflects supply-side problems with the quality and availability of electricity in 2010 rather than concerns about affordability; 2010 was a drought year in many parts of Vietnam, and load-shedding and brownouts were widespread.

**Figure 2.5 Perceived Sufficiency of Consumption by Urban and Rural, 2010**



Source: 2010 VHLSS.

2.60 Perceptions of sufficiency also differed across regions. Households in poorer regions (for example, Northern Mountains, Central Highlands) were more likely to report insufficient levels of consumption. Concerns about insufficient electricity were particularly high in regions in the north of Vietnam.

2.61 The responses to these questions can be used to calculate a subjective poverty line, following an approach proposed in Pradhan and Ravallion (2000). The perceived sufficiency of consumption is regressed against characteristics of the household such as total consumption, size, gender composition, age, and education of members. Different regression models were used to test for the sensitivity of results. Based on regression results, subjective poverty lines were calculated as the minimum total expenditure needed by a household to meet sufficient (foodstuff) consumption needs. (Annex 2.3 provides a more detailed description of the derivation of subjective poverty lines.)

2.62 Subjective poverty lines for 2010 ranged from a high of VND 888,000 per person per month to a low of VND 616,000 per person per month depending on the exact specification of the regression model. All estimates of subjective poverty lines were higher than Vietnam's official poverty lines, and nearly all were higher than the new GSO-WB poverty line (VND 653,000 per person per month). Most lines were clustered in the range of VND 700,000 to VND 800,000.

2.63 Estimates of subjective poverty lines suggest that the updated GSO-WB poverty lines and related poverty estimates do indeed reflect the aspirations and perceptions of the Vietnamese population.

**Table A2.1 Reference Food Basket for Different Population Groups**

Reference Group: Subpopulation:	2.5-20th percentile	2.5-10th percentile	2.5-20th percentile			
	(all)	(all)	Ethnic minorities	Ethnic majority	Urban	Rural
<b>Food item</b>						
Plain rice (including fragrant and specialty rice)	66.4	69.1	64.2	68.2	63.1	66.7
Sticky rice	4.2	4.4	7.9	1.1	1.2	4.5
Maize (in seed equivalent)	1.6	2.6	2.7	0.6	1.1	1.6
Cassava (in fresh-type equivalent)	1.0	1.4	1.9	0.2	0.3	1.0
Potato of various kinds (in fresh-type equivalent)	0.3	0.2	0.3	0.3	0.3	0.3
Wheat grains, bread, wheat powder	0.3	0.2	0.2	0.4	0.5	0.3
Flour noodle, instant rice noodle/porridge	1.3	1.0	1.1	1.4	1.9	1.2
Fresh rice noodle, dried rice noodle	0.4	0.3	0.3	0.6	0.6	0.4
Vermicelli	0.1	0.1	0.0	0.1	0.1	0.1
Pork (in equivalent of the pork type with removed fat)	4.0	3.6	4.0	4.1	4.3	4.0
Beef	0.1	0.1	0.1	0.1	0.1	0.1
Buffalo meat	0.0	0.0	0.1	0.0	0.0	0.0
Chicken meat	0.9	0.8	1.0	0.8	0.9	0.9
Duck and other poultry meat	0.2	0.1	0.1	0.2	0.1	0.2
Other types of meat	0.0	0.0	0.0	0.0	0.1	0.0
Processed meat	0.1	0.1	0.1	0.1	0.1	0.1
Lard, cooking oil	4.2	3.9	4.0	4.3	4.4	4.1
Fresh shrimp, fish	1.4	1.2	0.8	1.9	1.8	1.4
Dried and processed shrimps, fish	0.3	0.3	0.4	0.3	0.3	0.3
Other aquatic products and seafood (crabs, snails,...)	0.1	0.1	0.1	0.1	0.1	0.1
Eggs of chickens, ducks, Muscovy ducks, geese	0.7	0.6	0.5	0.8	0.8	0.7
Tofu	0.6	0.6	0.6	0.7	0.6	0.6
Peanuts, sesame	0.5	0.4	0.5	0.6	0.5	0.5
Beans of various kinds	0.3	0.2	0.3	0.2	0.3	0.2
Fresh peas of various kinds	0.1	0.1	0.1	0.1	0.1	0.1
Morning glory vegetables	0.5	0.5	0.4	0.7	0.6	0.5
Kohlrabi	0.1	0.1	0.0	0.1	0.1	0.1
Cabbage	0.1	0.1	0.1	0.1	0.2	0.1
Tomato	0.0	0.0	0.0	0.1	0.1	0.0
Other vegetables	0.7	0.6	0.7	0.6	0.8	0.6
Orange	0.0	0.0	0.0	0.0	0.1	0.0
Banana	0.6	0.6	0.6	0.5	0.5	0.6
Mango	0.0	0.0	0.0	0.0	0.0	0.0
Other fruits	0.4	0.3	0.3	0.5	0.6	0.4
Fish sauce	0.2	0.1	0.1	0.2	0.2	0.1
Salt	0.0	0.0	0.0	0.0	0.0	0.0
MSG						
Glutamate						
Sugar, molasses	1.3	1.0	0.8	1.7	1.6	1.3
Confectionery	0.6	0.6	0.6	0.7	0.8	0.6
Condensed milk, milk powder	0.2	0.1	0.1	0.2	0.2	0.2
Ice cream, yoghurt	0.0	0.0	0.0	0.0	0.1	0.0
Fresh milk	0.1	0.0	0.0	0.1	0.1	0.1
Alcohol of various kinds	1.3	1.3	1.7	0.9	1.0	1.3
Beer of various kinds	0.1	0.0	0.0	0.1	0.1	0.0
Bottled, canned, boxed beverages	0.1	0.1	0.0	0.1	0.2	0.1
Instant coffee						
Coffee powder	0.0	0.0	0.0	0.1	0.1	0.0
Instant tea powder						
Other dried tea	0.4	0.3	0.3	0.4	0.3	0.4
Tobacco						
Betel leaves, areca nuts, lime, betel pieces						
Outdoors meals and drinks	3.3	2.1	2.1	4.3	7.6	2.9
Other food and drinks	1.0	0.8	0.8	1.1	1.3	0.9

Source: 2010 VHLSS.

## Chapter Annexes

### Annex 2.1: Differences between “Temporally Comparable” and Comprehensive Welfare Aggregates

	<b>Temporally Comparable</b>	<b>Comprehensive</b>
Food	Excludes consumption of tobacco and betel nut. Assumes food items listed in section 5A2 but not listed in 5A1 were consumed during Tet/holidays. Tet/holidays considered 15.2 days long	Includes consumption of all 54 food items in VHLSS. Assumes the only food items consumed during Tet/holidays were those listed in section 5A1. Tet/holidays considered 14 days long.
Durables	Excludes consumption of certain durables: printers, photocopiers, mobile phones, microwaves, blenders, other transport. Imputes using depreciation rates from 1998 VLSS and real interest rate of 5 percent.	Includes all types of durables in 2010 VHLSS, but does not impute consumption for durables acquired more than 10 years prior. Imputes using depreciation rates calculated from 2010 VHLSS data and real interest rate of 5 percent.
Housing	Imputes housing consumption as 11.8 percent of other nonfood consumption for rural households and 21.4 percent for urban households.	Imputes housing consumption as 2.88 percent of reported housing values. 2.88 percent is the median ratio of rental income to housing values for the 2.6 percent of households in the 2010 VHLSS who are renters.
Education	Equals total expenditures related to compulsory school subjects.	Also includes supplemental expenditure on education, e.g., for tutors, typing classes, etc.
Health	Equals spending on curative and preventive care, including out-of-pocket costs of inpatient and outpatient health services, expenditures for nonprescription medicine, and expenditure on medical tools.	Also includes spending on health insurance.
Utilities: Electricity, Water, Garbage	Simple sum of reported spending.	Same.
Other nonfood items (e.g., clothing, fuel, kitchen items, services, etc.)	Excludes spending on parties and celebrations, and consumption of self-produced daily nonfood items from section 5B1.	
Temporal deflator	GSO’s rice, nonrice food, and nonfood monthly CPI.	Same.
Spatial deflator	GSO’s regional CPI.	2010 SCOLI.

## Annex 2.2: Spatial Cost-of-living Estimates for 2010 VHLSS

A detailed price survey of 64 items was conducted in the main market in all communes in the October 2010 round of the VHLSS sample ( $n = 1049$ ) and in half the communes in the December 2010 round ( $n = 539$ ). The 64 items included 45 specifically identified foods (including outdoor meals), and another 19 specially identified nonfoods, including some durable goods and services.

It was important to ensure consistency over space in the list of 64 items and to avoid problems with missing observations. Surveyors were given detailed specifications (aided by photographs to ensure standardization) and were instructed to take two observations on the price of the detailed specification and to record whether that particular specification was the most common one in the market. A particular size, and brand name (for packaged goods), was specified to avoid variation due to either bulk discounting or quality discounting. In almost 80 percent of the market-item combinations, the specification listed in the questionnaire was indeed the most common; it was available but not the most common in approximately 5 percent of markets. To deal with the missing prices problem in the remaining market-item combinations, surveyors also collected the price of the most commonly available specification that was not the target specification. The price of the target specification was regressed against the prices of the alternate specifications (using brand name fixed effects, or for unbranded items, creating quasi-brands by dividing into intervals based on their unit prices) and a set of regional fixed effects. The regressions were used to impute the price of the target specification in about 10 percent of markets. District or province average prices were used to impute the missing commune-level prices in the remaining few cases.

There are a number of different indexes that are used to adjust for cost-of-living differences. The Consumer Price Index (CPI) is typically based on a Laspayres index. For purposes of the SCOLI, new prices were combined with regional budget shares from the 2010 VHLSS in order to calculate a Törnqvist price index. The Törnqvist index is the geometric average of the price relativities between region  $i$  and the base region, weighted by the arithmetic average of the budget shares for the two regions.

$$T = \exp \left[ \sum_{j=1}^J \left( \frac{S_{kj} + S_{ij}}{2} \right) \ln \left( \frac{P_{ij}}{P_{kj}} \right) \right]$$

where  $P$  denotes prices in each region and  $S$  is the budget shares.

The Törnqvist index specifically accounts for the fact that consumers will substitute away from items that are expensive in their own region, relative to the base region, by using the budget shares of both the base region and the own region when weighting the price relativities. Technically, it closely approximates a true cost-of-living index for any arbitrary utility function, whereas the Laspeyres index (used for the CPI) is an exact measure of the cost-of-living index only when items are consumed in fixed proportions, without allowing for substitutions.

Because only 64 items had prices obtained in the SCOLI survey, while there are over 100 consumption items listed in the VHLSS (including the consumption of housing services and the service flow from durables), a mapping on prices to budget shares was formed, where the price relativities for some closely related items were used as a proxy for the missing price relativities for other items. Two exceptions were for utilities, where the trimmed median unit value of electricity tariffs in each region and sector was used as the proxy to form a price relativity and flow of accommodation services from dwellings. For the imputed rents, detailed econometric analysis of the housing section of the VHLSS questionnaire was undertaken, to estimate a hedonic house value equation, which allowed for regional differences in the cost of constant-quality housing service.

### Annex 2.3: Subjective Poverty in Vietnam

It is often argued that as countries develop and become less poor, societies' standards also evolve. Even if the basic point of departure is to measure poverty with an "absolute" poverty line that is held fixed in real terms over time, societies will need to update this poverty line from time to time so it remains relevant to a country's specific circumstances. As noted in chapter 2, as countries grow their national poverty lines increase over time. Regardless of how carefully an absolute poverty line is developed, it is not possible to avoid some degree of arbitrariness. Challenges in setting a poverty line are groups by Ravallion (2012) into (i) a referencing problem, including the choice of the reference group and basket, and (ii) an identification problem that involves translating households' utility function into the measurable expenditure space.

An alternative method for analyzing poverty that has received growing attention builds on subjective welfare questions included in household surveys. A *subjective* poverty line built up from such questions can offer an alternative entry point into the derivation of the poverty line, also help with the interpretation of the conventionally derived, Cost-of-Basic-Needs (CBN) poverty line. This subjective poverty line exercise is particularly interesting in the context of Vietnam given the proposed update to the 2010 CBN poverty line.

Van Praag (1968) introduced subjective welfare assessment by constructing utility functions based on respondents' answers to the question of how much income they regarded as "very bad," "bad," and so forth, to "very good." A similar method, the Minimum Income Question (MIQ), asks about the minimum income that respondents perceive to be necessary "to make ends meet" (Kapteyn 1994). However, applicability of the MIQ methodology to the poorest countries has been debated (Deaton and Zaidi 2002; Pradhan and Ravallion 2000; Ravallion and Lokshin 2000). Pradhan and Ravallion (2000) propose an adaptation to Kapteyn's method by asking households if their consumption of food (and other things) has been adequate to "meet their needs." The 2010 VHLSS included a set of similar questions, allowing us to follow a similar estimation methodology. The exact framing of the question, asked of the household head, is the following:

<b>11. Has consumption of food and foodstuff by your household [...] been sufficient to meet needs over the last 30 days?</b>			
Insufficient .....	1	<input type="checkbox"/>	<input type="checkbox"/>
Sufficient .....	2		
More than sufficient .....	3		
No comment/ no applicable .....	4		
<b>Sufficient' means having met your household's minimum consumption needs.</b>			
The same question as above is asked about "water" "electricity" "housing" "clothing & footwear"			

Out of total respondents to the 2010 VHLSS consumption section, 440 reported insufficient food consumption, 8,218 reported just sufficient food, and 686 indicated that their food consumption was more than sufficient (54 households did not respond). Satisfaction with adequacy of foodstuff consumption (including higher-cost calories from meat, vegetables, oils, and condiments) was less: 1,079 respondents reported inadequate consumption of foodstuffs, 7,580 indicated sufficient consumption, and 678 claimed their consumption was more than sufficient.

To calculate a subjective poverty line, we follow Pradhan and Ravallion (2000) in regressing perceived sufficiency of consumption on household expenditure and household (head) characteristics, using the sufficiency of foodstuff as the dependent variable. "Not Applicable" responses were excluded, and the other three categories are subjected to an ordered probit regression including actual household consumption, household size, and characteristics of the household head. Regression coefficients, presented in table A2.1, were also used in calculating a range of subjective poverty lines, including those reported in the chapter.

**Table A2.1 Subjective Welfare Regression and Variables at Country Means**

	<b>Regression Coefficient</b>	<b>Results S.E.</b>	<b>Means of Mean</b>	<b>Variables S.D.</b>
Log total household expenditure	0.717***	0.029	10.978	0.731
Log household size	-0.475***	0.049	1.435	0.381
Household head is female	-0.092**	0.040	0.220	0.414
Household head has a wage job	-0.172***	0.031	0.407	0.491
Household has at least one widow(er)	-0.040	0.042	0.186	0.389
Highest grade household head	0.022***	0.005	7.313	3.683
Household head is registered within the commune	0.046	0.034	0.256	0.437
Household head is of ethnic majority (Kinh)	0.516***	0.044	0.854	0.353
Share of household < 18 years old	0.206***	0.078	0.256	0.206
Share of household > 59 years old	0.009	0.093	0.072	0.175
Log land area owned by household	0.029***	0.005	4.859	3.757
Urban	-0.148***	0.041	1.297	0.457
Cutoff 1	6.264***	0.277		
Cutoff 2	9.327***	0.289		
Number of observations	9,337			
Pseudo R2	0.139			

*Note:* The dependent variable is “perceived sufficiency of foodstuff consumption” with the following answer codes: 1 = insufficient, 2 = sufficient, and 3 = more than sufficient (“not applicable” is recoded as missing). The results are from an ordered probit regression. The natural logarithm is used for the log variables. Significance levels are \*\*\* 0.01, \*\*0.05, \* 0.1. The means of the variables and the regression are both weighted by population weights.

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# Chapter 3

## **Poverty Profile: Establishing the Facts about Poverty and the Poor in Vietnam**

*A new poverty profile is presented that characterizes the poor and the extreme poor and compares them with the rest of society along a number of key dimensions including geographic location, ethnicity, sector of employment, income sources, educational attainment, ownership of durable goods, landholdings, household amenities, child poverty, and coverage under social protection and poverty reduction programs and policies. Statistical analysis is complemented by a rich body of qualitative research. The poor in Vietnam today are similar in important respects to the poor in the late 1990s. Among other factors, poverty is linked to rural and upland locations, agricultural livelihood, ethnic identity, low educational attainment, exposure to risk and rising vulnerability.*

## A. Introduction

3.1 Poverty reduction remains a challenge in Vietnam, albeit one that has changed dramatically in scope and nature over the last two decades. This chapter revisits the basic facts about poverty and the poor in Vietnam. It takes stock of what we know about poverty today and draws comparisons with the situation of the poor in the late 1990s, with the aim of highlighting both important areas of progress and remaining and new challenges. The chapter presents a new profile of the poor, using the 2010 General Statistics Office-World Bank (GSO-WB) poverty line and more comprehensive measures of household welfare proposed in Chapter 2. The analysis is primarily based on the 2010 Vietnam Household Living Standards Survey (VHLSS), but also draws selectively on earlier rounds of the Vietnam Living Standards Survey (VLSS), (particularly the 1998 VLSS), and other sources, such as recent Participatory Poverty Assessments and qualitative field studies, 2009 poverty maps, and other supplementary data sets.

3.2 A poverty line only discriminates between poor and non-poor households. It ignores the fact that not all poor people are the same; some have incomes or consumption very close to the poverty line, while others live in much poorer conditions. Nor are the non-poor homogeneous; some live near the poverty line (referred to as the “near-poor” in Vietnam) while others are much more prosperous. The analysis presented in this chapter recognizes the broad economic diversity among poor and non-poor households in Vietnam. At the lower end of the welfare distribution, we distinguish between the “extreme poor” (per-capita expenditures below two-thirds of the poverty line) and “poor” (per-capita expenditures below the poverty line). The remainder of the population is analyzed on the basis of per-capita expenditure quintiles and deciles. Specifically:

- Individuals are ranked by per-capita expenditures from least well-off to most well-off, then divided into five equally-sized population groups (for quintiles) and ten equally sized population groups (for deciles). Quintile 1 comprises the poorest 20 percent of the population, and quintile 5 comprises the wealthiest 20 percent. Similarly, decile 1 comprises the poorest 10 percent of the population and decile 10 the wealthiest 10 percent.
- Individuals are also categorized into *expanded* per-capita expenditure quintiles, where the poor are classified into two groups (all poor and extreme poor) and the non-poor are classified by the standard per-capita expenditure quintiles. Expanded quintiles thus comprise six groups:
  - The extreme poor: individuals whose per-capita expenditures are less than two-thirds of the poverty line (poorest 8 percent of the population)
  - All poor: individuals whose per-capita expenditures are below the poverty line (poorest 20.7 percent of the population)
  - And quintiles 2 through 5 (as above).

3.3 In the context of the 2006-2010 Socio-Economic Development Plan (SEDP), the Ministry of Labour, Invalids and Social Affairs (MOLISA) introduced a “near-poor” classification, which includes households whose per-capita income lies between the poverty line and 1.3 times the poverty line. If this definition is applied to the 2010 GSO-WB poverty line, roughly three-quarters of individuals in quintile 2 would fall into the near-poor group.

3.4 As a follow-on to the Millennium Development Goals, the World Bank is proposing to launch a new global initiative designed to accelerate the rate of poverty reduction among the poorest and most destitute and to promote shared prosperity over the next decade. Research from countries throughout the world shows that the poorest and most destitute are more difficult to reach than those living close to the poverty line; they face a structural barriers and specific constraints, and better policies and programs are needed to address these specific challenges. In many countries, including Vietnam, the extreme and destitute poor are falling further behind. This chapter develops profiles of the extreme poor as well as the total poor, and recognizes that many of the near-poor (quintile 2) remain vulnerable to falling (back) into poverty.

3.5 In constructing the poverty profile, households and individuals are also categorized by socioeconomic group (ethnic minority, Kinh majority), sector (urban, rural), and economic region. The Government of Vietnam has identified eight economic regions encompassing 63 provinces, more than 680 districts, and two major urban areas (Hanoi and Ho Chi Minh City). Annex 3.1 provides a description of the eight economic regions including the North East region, North West region, the Red River Delta (which houses Hanoi), the North Central Coast, the South Central Coast, the Central Highlands, the South East (which houses HCMC), and the Mekong River Delta. The North East and North West are mountainous regions where the majority of Vietnam's ethnic minorities reside. Ethnic minorities also live in upland areas of central and southern regions, particularly the Central Highlands. The two deltas (Red River, Mekong) are major rice growing regions, and the majority of Vietnam's rice exports come from the Mekong River Delta.

### The Stylized Facts about Poverty and Poor Households at the End of the 1990s

3.6 The *Vietnam Development Report 2000: Attacking Poverty* (World Bank 1999) described the key characteristics of poor households at the end of the 1990s, drawing on the 1993 and 1998 VLSS combined with a series of Participatory Poverty Assessments (PPAs) carried out in 1999. These early PPAs stressed core poverty concerns like hunger; lack of productive assets; high exposure to adverse shocks like drought, flooding, and illnesses; and concerns about social marginalization and isolation (particularly for ethnic minority groups). Many poor households struggled to feed and educate large families, and child poverty was widespread. Landlessness was rising, and there were limited options for off-farm employment (box 3.1).

#### Box 3.1 Defining Characteristics of Poor Households at the end of the 1990s

By the end of the 1990s, the key defining characteristics of poor households included:

- The poor lived in rural areas and were predominantly farmers with low levels of educational attainment, limited access to information, and low function skills. In 1998, nearly four-fifths of the poor were agriculture households.
- Poor households had small landholdings, and landlessness was increasing, especially in the Mekong Delta. Households that were unable to make a living from the land found few opportunities for stable off-farm income generation. There was an urgent need for reforms to stimulate demand for off-farm employment.
- Households with many children or few laborers were disproportionately poor and were particularly vulnerable to rising and variable health and education costs. Newly formed households went through an initial phase of poverty, often aggravated by limited access to land. Poor households were also frequently caught in a debt trap.
- Poor households were vulnerable to seasonal hardship and household-specific and communitywide shocks and some were socially and physically isolated.
- Poverty among ethnic minority groups had declined, but not as rapidly as for the majority population. Ethnic minorities faced many specific disadvantages that could best be addressed through an Ethnic Minority Development Program.
- Migrants to urban areas who were poor and who had not secured permanent registration faced difficulties accessing public services and some felt socially marginalized. Further work was needed to identify the best way to help these groups.
- Children were overrepresented in the poor population; they were less able to attend school and were trapped in a cycle of inherited poverty. Many felt insecure and uncertain about their future.

Source: World Bank 1999.

## Many of these Stylized Facts are still True Today

3.7 Although poverty has fallen dramatically, many of the factors that characterized the poor in the 1990s still characterize the poor today: low education and skills, heavy dependency on subsistence agriculture, physical and social isolation, specific disadvantages linked to ethnic identity, and exposure to natural disasters and risks. Those that moved out of poverty acquired more schooling and job skills, diversified out of agriculture and into manufacturing and services, and reduced exposure to seasonal hardships and shocks through income diversification and migration. But some of the stylized facts have changed. For example, issues such as ethnic minority poverty that were only emerging as concerns in the late 1990s are much greater concerns today. Other issues, like poverty and vulnerability among migrants in urban areas, have become lesser concerns. Although income poverty remains very low in Vietnam's cities and towns, there is evidence that new forms of poverty are arising: urban households are particularly vulnerable to sharp bouts of inflation and a rising cost of living. Risk remains an important feature of the rural economy as well, including weather-related risks and the emerging impacts of climate change for agriculture.

## B. The Poor in Vietnam still Predominately Live in Rural Areas and are Increasingly Concentrated in Upland Regions

3.8 As shown in table 3.1, an estimated 20.7 percent of the population was poor in 2010 and 8 percent was extremely poor. Poverty remains a rural phenomenon in Vietnam; more than 90 percent of the poor and 94 percent of the extreme poor live in rural areas. The poor in urban areas for the most part live in smaller cities and towns (Section G). However, qualitative studies complete for this report and recent research on urban poverty (Haughton et. al. 2010) suggest that urban low-income households are impacted by other (non-income) dimensions of poverty, such as poor sanitation, lack of adequate housing, limited coverage of social insurance, increasing exposure to risk, and continuing vulnerability to poverty.

**Table 3.1 2010 Poverty Headcount and Composition, by Region and Sector**

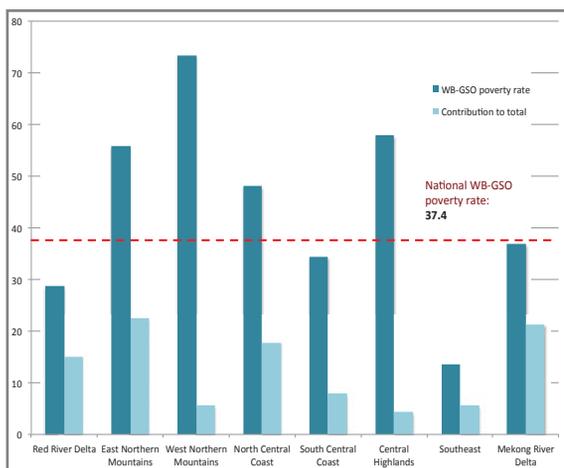
	Poverty		Extreme Poverty		Share of total pop (%)
	Index (%)	Contribution to total (%)	Index (%)	Contribution to total (%)	
National	20.7	100.0	8.0	100.0	100.0
Red River Delta	11.4	12.3	2.8	7.8	22.3
East Northern Mountains	37.7	20.8	17.9	25.8	11.5
West Northern Mountains	60.1	9.1	36.5	14.4	3.2
North Central Coast	28.4	16.5	9.7	14.6	12.0
South Central Coast	18.1	7.4	5.9	6.3	8.5
Central Highlands	32.8	9.5	17.0	12.9	6.0
Southeast	8.6	7.2	3.1	6.9	17.5
Mekong River Delta	18.7	17.1	4.8	11.4	19.0
Rural	27.0	91.4	10.7	94.4	70.3
Urban	6.0	8.6	1.5	5.6	29.7

Source: 2010 VHLSS.

3.9 The spatial distribution of poverty has changed over time. In the 1990s, poverty was widespread in Vietnam. Although poverty rates were higher in some regions than others, (for example, in sparsely settled provinces in the Northern Mountains and Central Highlands), the majority of the poor lived in the

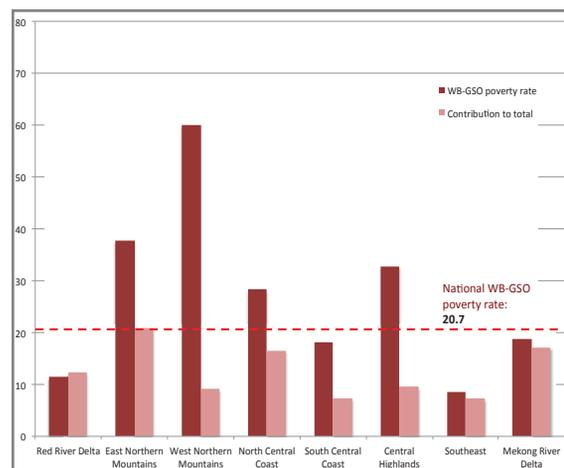
more densely settled Delta regions (figure 3.1). Poverty fell throughout Vietnam between 1998 and 2010, but it fell more rapidly in fast-growing regions around Hanoi and Ho Chi Minh City (that is, the Red River Delta and the Southeast). Uneven progress has resulted in substantial changes in the spatial distribution of poverty, with the remaining poor becoming more concentrated in the upland areas in the north of Vietnam and in the Central Highlands (figure 3.2). Chapter 4 uses poverty mapping methods to look at the spatial distribution of poverty at lower levels of spatial disaggregation (provinces and districts).

**Figure 3.1 Level and Composition of Poverty by Region, 1998**



Source: 1998 VLSS.

**Figure 3.2 Level and Composition of Poverty by Region, 2010**



Source: 2010 VHLSS.

### C. Many of the Poor are Farmers Whose Livelihoods are Primarily Linked to Agriculture

3.10 The poor in Vietnam are still predominately farmers; 32.9 percent of agricultural households live below the poverty line,<sup>20</sup> which is nearly three times higher than the national poverty rate, and agricultural households make up 65 percent of the poor and 73 percent of the extreme poor compared with a population share of only 41 percent (table 3.2). Agricultural households also contribute disproportionately to the poverty gap and poverty severity.

**Table 3.2 Poverty Headcount and Composition in 2010, by Sector of Employment of Household Head**

	Poverty		Extreme Poverty		Share of total pop (%)
	Index (%)	Contribution to total (%)	Index (%)	Contribution to total (%)	
National	20.7	100.0	8.0	100.0	100.0
Employment of household head:					
Not employed	13.2	9.1	5.3	9.6	14.4
Agriculture	32.9	64.8	14.1	72.5	40.9
Family business	5.9	4.4	1.2	2.3	15.4
Employed for wages in:					
Industry & manufacturing	13.2	4.0	2.7	2.1	6.3
Construction	19.3	7.7	5.1	5.3	8.3
Services	14.0	10.0	4.4	8.2	14.9

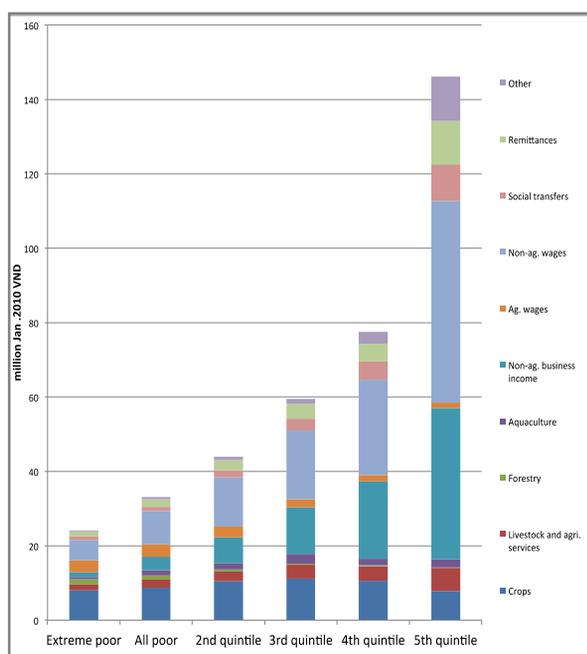
Source: 2010 VHLSS.

<sup>20</sup> Defined as households where the head's main job is in agriculture.

3.11 The level and composition of household income across the expanded per-capita expenditure quintiles is described in figure 3.3. The height of each bar reflects the average level of per-capita income for each group. Figure 3.4 looks in greater detail at the composition of income for each group, broken down by income from agriculture sources (crop cultivation, livestock, forestry, aquaculture, and agriculture wages), nonfarm family enterprises, non-agriculture wages, social transfers, domestic and overseas remittances, and other sources. According to figure 3.4, poor households derive roughly half their income from agricultural activities, including agricultural wages. However, what differentiates the incomes of the poor from wealthier households is not the level of income from agricultural activities; crop incomes are surprisingly equal across wealth quintiles, reflecting Vietnam's broadly egalitarian distribution of agriculture land. What differentiates the incomes of the poor from wealthier households is, instead, the extent to which households have successfully diversified into off-farm activities. Progress in the 1990s was driven by on-farm diversification, for instance into cash crops, livestock, and (in some parts of the country) fish and shrimp farming (World Bank 1999). But progress in recent years has been driven by diversification into business and trading and, even more importantly, by salaried employment in industry and manufacturing and jobs in the service sector. Even the extreme poor have income sources outside agriculture, although as shown in the next section, this differs for poor minority households compared to poor minorities.

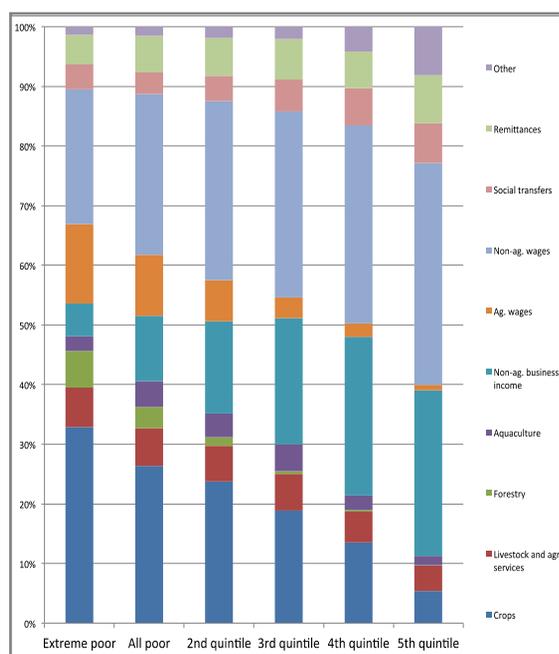
**Figure 3.3 Household Income by Expanded Quintile, 2010**

Level of household incomes, million VND (January 2010)



**Figure 3.4 Composition of Income by Expanded Quintile, 2010**

Composition of household income (percent)

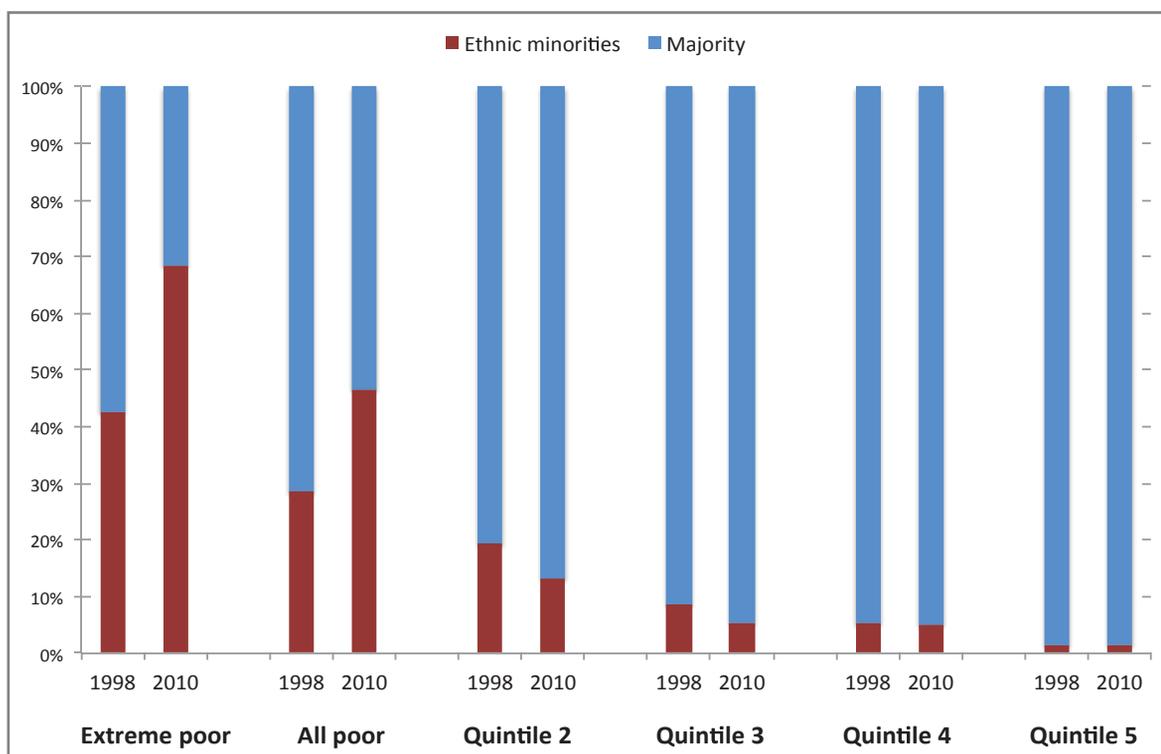


Source: 2010 VHLSS.

## D. Ethnic Identity Matters even more for Poverty Today

3.12 Although Vietnam's 53 ethnic minority groups make up only 15 percent of the total population, they account for nearly half (47 percent) of the total poor and 68 percent of the extreme poor in Vietnam. (Figure 3.5). Although living conditions for many minorities have improved since the late 1990s, the concentration of minorities among the poor has nonetheless increased dramatically —by 25 percentage points for the extreme poor (from 43 percent in 1998 to 68 percent in 2010) and 19 percentage points for the poor (from 28 percent in 1998 to 47 percent in 2010).

**Figure 3.5 Composition of Poor and Better-off Households in 2010, by Ethnicity**



Sources: 1998 VLSS and 2010 VHLSS.

3.13 Despite progress, as shown in the Table 3.3, 66.3 percent of minorities still lived below the poverty line and 37.4 percent lived below the extreme poverty line in 2010. In comparison, only 12.9 percent of the Kinh majority population was still poor and 2.9 percent lived below the extreme poverty line in 2010. (Table 3.4) Because the Kinh make up a much larger share of the population in Vietnam, they still account for just over half (53 percent) of the total poor in Vietnam.

**Table 3.3 Ethnic Minority Poverty: Headcount and Composition in 2010, Region and Sector**

	Poverty		Extreme Poverty		Share of total pop (%)
	Index (%)	Contribution to total (%)	Index (%)	Contribution to total (%)	
National	66.3	100.0	37.4	100.0	100.0
Red River Delta	13.1	0.2	0.0	0.0	1.0
East Northern Mountains	64.8	35.4	34.9	33.9	36.2
West Northern Mountains	72.8	18.9	45.5	20.9	17.2
North Central Coast	71.2	14.0	34.8	12.1	13.0
South Central Coast	78.4	5.3	50.7	6.1	4.5
Central Highlands	76.6	15.2	50.4	17.7	13.1
Southeast	46.4	3.5	22.2	3.0	5.0
Mekong River Delta	50.4	7.6	23.3	6.2	10.0
Rural	68.9	95.5	39.3	96.8	91.9
Urban	36.5	4.5	14.8	3.2	8.1

Source: 2010 VHLSS.

**Table 3.4 Kinh Majority Poverty: Headcount and Composition in 2010, by Region and Sector**

	Poverty		Extreme Poverty		Share of total pop (%)
	Index (%)	Contribution to total (%)	Index (%)	Contribution to total (%)	
National	12.9	100.0	2.9	100.0	100.0
Red River Delta	11.4	22.9	2.8	24.7	26.0
East Northern Mountains	14.4	8.0	3.3	8.2	7.2
West Northern Mountains	10.7	0.6	1.3	0.3	0.8
North Central Coast	20.4	18.6	4.9	19.8	11.9
South Central Coast	13.0	9.2	2.1	6.5	9.2
Central Highlands	12.4	4.6	1.5	2.4	4.8
Southeast	6.9	10.5	2.3	15.3	19.7
Mekong River Delta	16.1	25.5	3.3	22.7	20.5
Rural	17.0	87.7	3.9	89.1	66.6
Urban	4.8	12.3	1.0	10.9	33.4

Source: 2010 VHLSS.

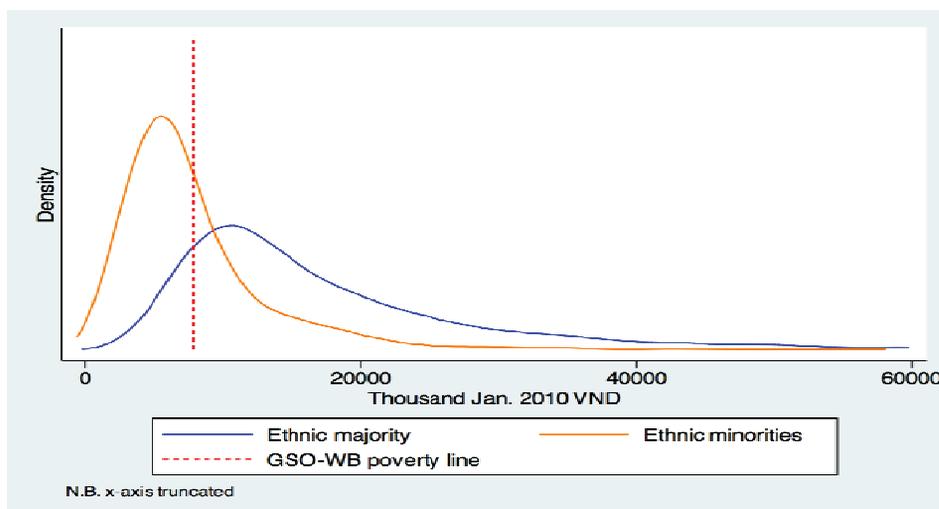
3.14 Looking beyond the headcount, the poverty conditions experienced by ethnic minority poor are more severe than the conditions experienced by poor Kinh households. Minorities are more heavily concentrated among the extreme poor, as illustrated in table 3.5, and both the depth and severity of poverty are substantially higher for minorities. These differences are illustrated graphically in figure 3.6: the distribution of welfare (per-capita expenditures) for minorities who fall below the poverty line is skewed to the left and the overall distribution has a much thinner “tail” than the distribution of welfare for Kinh majorities. In contrast, poor Kinh have welfare levels much closer to the poverty line than poor ethnic minorities.

**Table 3.5 Poverty Headcount, Gap, and Severity in 2010, Kinh and Ethnic Minorities**

	Headcount		Poverty Gap		Poverty Severity	
	Index (%)	Contribution to total (%)	Index (%)	Contribution to total (%)	Index (%)	Contribution to total (%)
<b>Poor:</b>						
Kinh/Hoa	12.9	53.3	2.7	39.7	0.9	31.1
Ethnic minorities	66.3	46.7	24.3	60.3	11.3	68.9
<b>Extreme poor:</b>						
Kinh/Hoa	2.9	31.5	0.5	21.5	0.1	15.1
Ethnic minorities	37.4	68.5	9.7	78.5	3.7	84.9

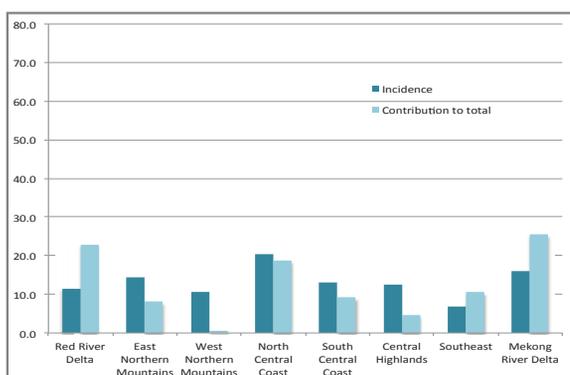
Source: 2010 VHLSS.

**Figure 3.6 Distribution of Welfare for Kinh and Ethnic Minorities, 2010**



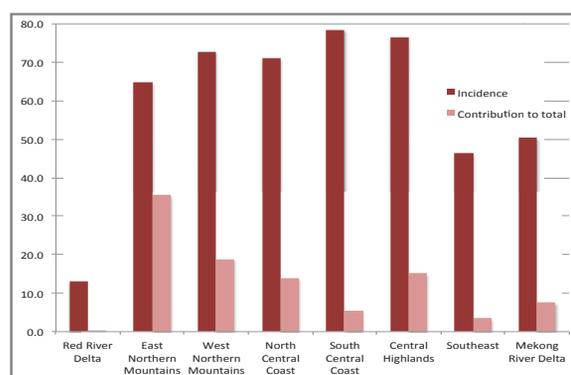
3.15 There are important differences in the spatial distribution of Kinh and ethnic minority populations in Vietnam. Minority populations remain heavily concentrated in the East and West Northern Mountains, in the Central Highlands, and (to some extent) in the North Central Coast. In contrast, the Kinh population is concentrated in large cities (including Hanoi and Ho Chi Minh City), the Red River and Mekong deltas, and in lower elevations along the coast and inland areas. The spatial distribution of poverty tends to follow the spatial distribution of their respective populations: poor Kinh households are concentrated in the deltas and in provinces along the North Central Coast. In contrast, most poor minority households live in upland areas, with the West Northern Mountain region and Central Highlands accounting for a somewhat higher share of poor ethnic minorities than their share in the population. Notably, across all locations (with the exception of Red River Delta, where very few ethnic minorities reside), poverty rates among ethnic minorities average between four and seven times higher than poverty rates among the Kinh (figures 3.7 and 3.8). Majorities living in minority areas have substantially better living conditions on average than the minorities living in these same areas.

**Figure 3.7 Level and Composition of Poverty by Region, for Kinh/Hoa**



Source: 2010 VHLSS.

**Figure 3.8 Level and Composition of Poverty by Region, for Ethnic Minorities**



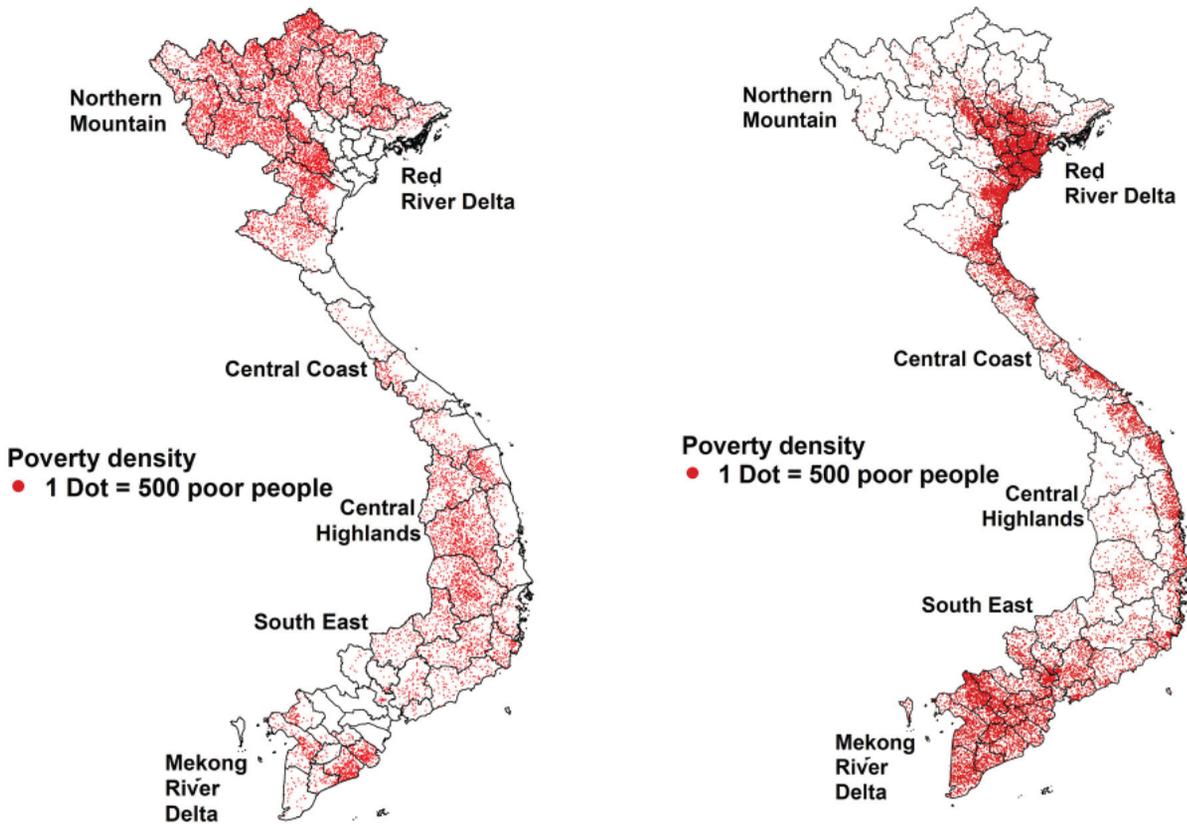
Source: 2010 VHLSS.

3.16 Maps 3.1 and 3.2 illustrate the strong spatial segregation between poor minority and poor majority households in Vietnam. Poor minorities are heavily concentrated in the East and West Northern Mountains, upland areas in the North Central Coast, and the Central Highlands. In contrast,

poor people from the majority population are concentrated in the Red River Delta, along coastal regions, and in the Mekong Delta.

**Map 3.1 Spatial Distribution of Poor Minorities**

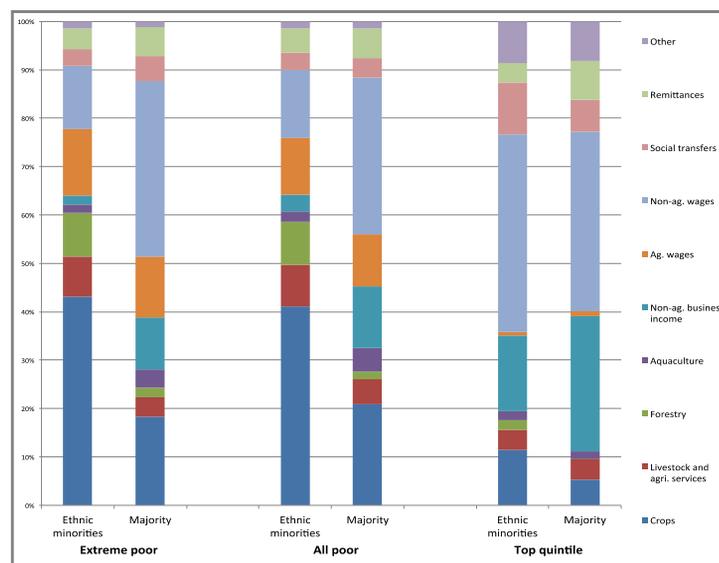
**Map 3.2 Spatial Distribution of Poor Kinh**



Sources: Cuong et al. 2012.

3.17 There are important differences in livelihood strategies and employment patterns between poor majority and minority households (Figure 3.9). Poor minorities earn three-quarters of their total income from agriculture and allied activities, including wage employment in agriculture. In contrast, poor majority households earn only 42 percent from agriculture and allied activities and a much higher share from off-farm activities, both salaried non-farm employment and family enterprises. Forestry is important for minorities, but much less so for poor majorities, in large part reflecting differences in residential patterns. Notably, the composition of income is similar between ethnic minorities and majorities in the wealthiest quintile.

**Figure 3.9 Composition of Income for Extreme Poor, Poor, and Top Quintile in 2010: Comparing Kinh/Hoa and Ethnic Minority Households**

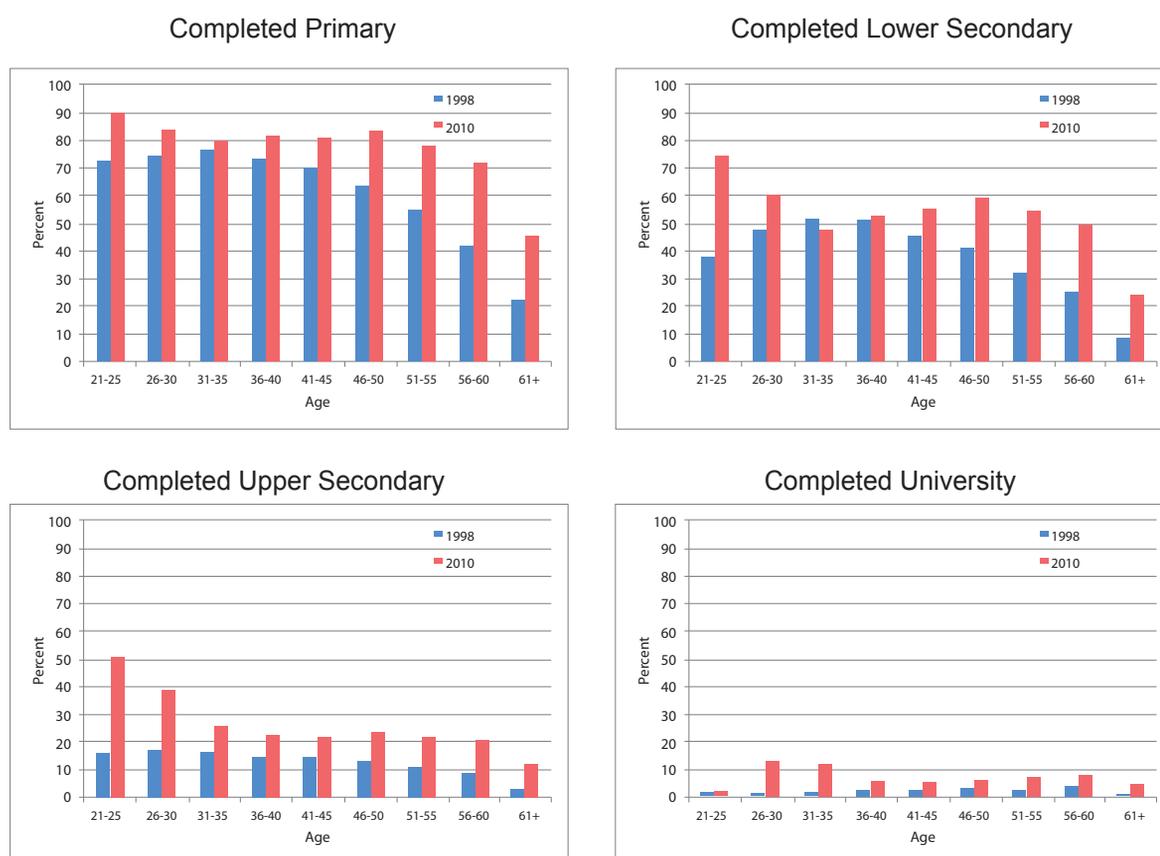


Source: 2010 VHLSS.

### E. Poverty is Still Linked to Low Education Attainment

3.18 Vietnamese today are far better educated than they were a decade ago. Primary completion rates were high already by the end of the 1990s, as evidenced in the first panel of Figure 3.10. Since then, the other panels illustrate the rapid increase in enrolments at lower and upper secondary levels, leading to an increase in the number of students who attend colleges and universities. However, lack of education continues to be an important determinate of poverty, and this was highlighted by respondents in both urban and rural areas as a cause of rising inequality (Chapter 6).

**Figure 3.10 Schooling Achievement by Age Cohort, 1998 and 2010**



Source: 1998 VLSS, 2010 VHLSS.

3.19 As shown in Table 3.6, individuals living in households whose head did not complete primary school have the highest poverty rate in 2010 (nearly 40 percent or twice the national average) as well as the highest extreme poverty rate (nearly 19 percent or two-and-a-half times the national average). The inverse relationship between education and poverty has become stronger over time: in 1998, households whose heads had completed primary or less schooling accounted for 55 percent of the total poor. By 2010, they accounted for 75 percent of the poor. Rising levels of education coupled with rapid income diversification has been a powerful force for poverty reduction in Vietnam since the late 1990s.

**Table 3.6 Poverty Headcount and Composition in 2010, by Education of Household Head**

	Poverty		Extreme Poverty		Share of total pop (%)
	Index (%)	Contribution to total (%)	Index (%)	Contribution to total (%)	
National	20.7	100.0	8.0	100.0	100.0
Household head's highest educational qualification:					
None	39.8	46.1	19.3	58.1	24.0
Primary	23.5	28.5	7.9	25.0	25.1
Lower secondary	15.3	18.4	4.2	13.2	24.9
Upper secondary	8.7	4.2	2.1	2.6	9.9
Vocational	5.8	2.6	0.8	0.9	9.4
Higher education	0.7	0.2	0.1	0.1	6.6

Source: 2010 VHLSS.

3.20 Table 3.7 describes the distribution of education for persons 21 years and older across expanded per-capita expenditure quintiles, illustrating in yet another way the strong relationship between rising levels of education and increasing wealth in Vietnam. By 2010, 40 percent of persons 21 years and older in the richest quintile had completed a university degree; in contrast, less than 2 percent in the poorest quintile were university graduates. In fact, more than a quarter of those in the poorest quintile had not even completed primary school by 2010.

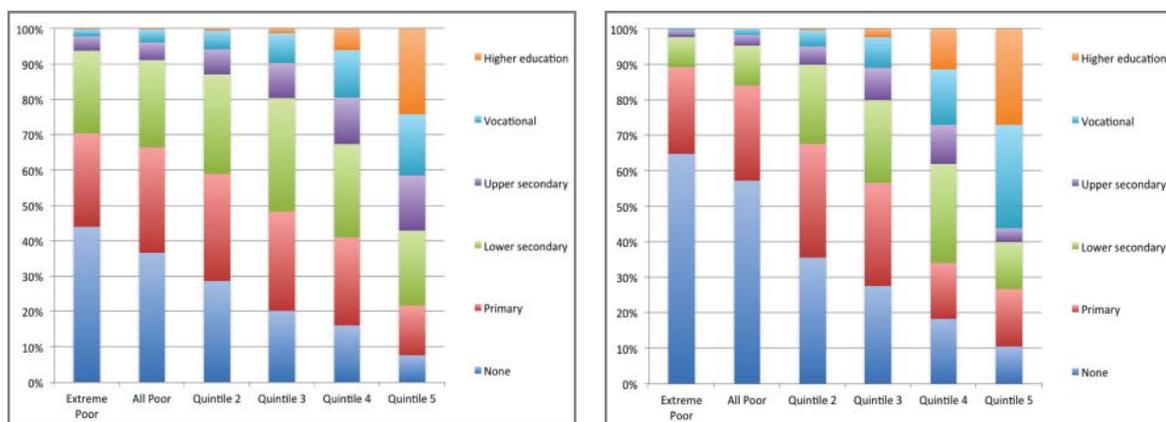
3.21 Table 3.7 also highlights the gaps in education between ethnic minorities and Kinh majorities. Even among the poor, minorities are substantially less educated than their Kinh economic peers: for example, 39 percent of poor minorities had not completed primary school compared to only 16 percent of poor Kinh majorities. Achievement gaps are in part due to a historical legacy of lower education achievement among many minority populations, but also reflect lower (albeit increasing) current enrolment rates. Figure 3.11 illustrates the relationship between education and total per-capita expenditures for Kinh and minorities documented in Table 3.7.

**Table 3.7 Distribution of Completed Education in 2010, by Ethnicity and Expanded Quintiles (persons age 21 and older)**

	None	Primary	Lower secondary	Upper secondary	Vocational	Higher education
<b>National</b>						
Extreme Poor	37.1	28.3	23.4	9.3	1.2	0.7
All Poor	26.7	29.7	28.7	12.3	1.3	1.4
Quintile 2	12.4	26.6	34.7	20.7	3.4	2.3
Quintile 3	6.6	21.6	31.8	27.0	6.1	6.9
Quintile 4	4.7	14.2	23.1	30.3	9.8	17.8
Quintile 5	2.0	7.7	15.6	25.6	9.2	40.0
Rural	13.1	23.1	30.6	21.9	4.7	6.7
Urban	4.7	12.5	17.6	25.9	9.0	30.3
National	10.6	20.0	26.7	23.1	5.9	13.7
<b>Majority</b>						
Extreme Poor	21.7	25.1	33.6	16.1	2.5	1.0
All Poor	16.4	31.2	34.5	14.2	1.8	2.0
Quintile 2	10.7	26.2	36.0	21.2	3.3	2.6
Quintile 3	6.3	21.6	32.2	27.0	6.0	6.9
Quintile 4	4.5	14.6	23.4	30.3	9.8	17.4
Quintile 5	2.0	7.8	15.7	25.6	9.0	39.9
<b>Ethnic minorities</b>						
Extreme Poor	44.2	29.8	18.7	6.1	0.6	0.6
All Poor	38.6	28.0	21.9	10.1	0.9	0.6
Quintile 2	23.3	28.5	25.8	17.5	3.9	0.9
Quintile 3	12.2	21.5	25.3	26.1	8.2	6.8
Quintile 4	9.3	7.2	18.3	29.0	10.0	26.3
Quintile 5	4.2	1.7	9.2	23.0	17.1	45.0

Source: 2010 VHLSS.

**Figure 3.11 Education Achievements by Expanded Quintiles (persons age 21 and older)**  
**Kinh/Hoa Ethnic Minorities**



Source: 2010 VHLSS.

3.22 High levels of current enrolments indicate that future generations of workers will be better prepared to participate in Vietnam’s modernizing economy than previous generations. However, gaps in enrolments between children from poor and better-off households have persisted (Table 3.8), including gaps between enrolments for Kinh and ethnic minority children. (Table 3.9) Most primary-school-aged children—rich and poor, minority and majority—are enrolled in school. But enrolments among (poor) minorities drop off at the lower secondary level, and children from lower-income households are much less likely to be enrolled in upper secondary schools than children from better-off households. Chapter 6 analyzes the links between education and rising inequality, including the role of inequality in opportunities (especially education) in perpetuating poverty across generations.

**Table 3.8 School Enrolment Rates (net) for Boys and Girls in 2010, by Expanded Quintiles and Region**

	Primary			Lower Secondary			Upper Secondary		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Extreme Poor	91.6	88.8	90.2	62.2	70.8	66.6	16.4	28.1	22.9
All Poor	90.2	90.2	90.2	68.6	75.6	72.2	28.1	36.1	32.4
Quintile 2	93.7	92.6	93.2	77.5	82.6	79.9	50.0	56.5	53.0
Quintile 3	94.1	92.9	93.5	84.9	85.5	85.2	58.1	62.5	60.3
Quintile 4	92.5	93.7	93.1	90.5	90.4	90.5	66.0	73.6	69.5
Quintile 5	93.3	97.6	95.3	86.1	90.3	88.0	76.2	85.6	80.9
Red River Delta	95.0	93.5	94.3	89.6	91.9	90.6	69.2	67.2	68.2
East Northern Mtns	93.0	90.9	91.9	85.2	83.0	84.1	56.0	60.7	58.3
West Northern Mtns	93.3	93.9	93.6	80.9	65.5	74.2	47.4	38.8	42.7
North Central Coast	90.9	91.1	91.0	83.8	87.6	85.8	54.7	58.9	56.8
South Central Coast	92.1	90.7	91.4	89.5	86.4	88.1	58.4	69.6	64.0
Central Highlands	95.4	87.7	91.9	67.3	78.2	73.1	45.6	52.5	49.3
Southeast	90.3	97.9	94.1	76.1	81.8	78.4	52.8	63.1	58.0
Mekong Delta	91.4	92.7	92.0	66.1	76.5	71.2	39.2	50.5	44.1
Rural	92.4	91.9	92.2	78.9	82.8	80.7	49.3	54.5	51.8
Urban	92.9	95.2	94.1	83.5	85.0	84.2	68.8	76.2	72.5
National	92.5	92.8	92.6	80.0	83.3	81.5	53.9	60.1	57.0

Source: 2010 VHLSS.

3.23 Gender gaps in minority school enrolments have received a lot of attention in Vietnam. These gaps have closed at the primary level but persist at the secondary level and above. However, reverse gender gaps—substantially higher enrolments for girls compared to boys at the secondary level—have started to emerge at the secondary level, particularly among children from poor (majority) households and in the Central Highlands, the Southeast, and the Mekong Delta. Concerns have been raised that boys from poor households are leaving school earlier than girls to take up jobs in the service sector and manufacturing, “pushed” by poverty and economic imperatives and “pulled” by expanding employment opportunities in nearby cities and towns. While leaving school after six or eight years of education may make sense given short-run incentives, education choices made today will follow children for the rest of their lives. These young workers may not have the education and skills to get good jobs in the future as Vietnam’s economy continues to grow and modernize, and Vietnam’s economic development will be constrained by the lack of an educated and skilled labor force.

**Table 3.9 Net School Enrolment Rates for Kinh/Hoa and Ethnic Minority Boys and Girls in 2010, by Expanded Quintile**

	Primary			Lower Secondary			Upper Secondary		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
<b>Majority</b>									
Extreme Poor	92.4	96.4	94.5	69.7	94.1	81.8	27.6	48.5	39.9
All Poor	88.3	94.2	91.0	71.9	85.8	79.5	34.2	46.4	40.8
Quintile 2	93.2	92.1	92.7	75.7	84.2	79.6	50.7	57.7	54.0
Quintile 3	93.8	93.0	93.4	85.2	85.7	85.4	58.1	63.3	60.7
Quintile 4	92.4	94.6	93.5	91.0	90.5	90.7	66.7	75.4	70.7
Quintile 5	93.2	97.5	95.3	86.0	90.2	87.9	76.8	85.3	81.0
<b>Ethnic minorities</b>									
Extreme Poor	91.4	86.1	88.7	59.4	62.5	61.0	12.4	19.2	16.1
All Poor	92.5	86.5	89.3	65.5	63.1	64.4	22.4	26.3	24.5
Quintile 2	97.4	96.1	96.8	90.1	72.2	81.6	46.1	48.3	47.1
Quintile 3	100.0	90.5	95.4	78.0	82.1	80.3	57.9	43.4	53.1
Quintile 4	94.5	74.9	85.5	80.1	88.9	84.4	58.4	41.2	52.3
Quintile 5	100.0	100.0	100.0	100.0	100.0	100.0	25.7	100.0	75.1

Source: 2010 VHLSS.

3.24 There are many reasons why children from poor and ethnic minority households do not stay in school. High out-of-pocket costs are one factor (Chapter 1). Location is another. In upland regions, particularly in the Northern Mountains, upper secondary schools are often located at some remove from rural communities, and students are forced to board rather than commute to school each day from their homes. Background qualitative studies carried out for this report also highlight widespread concerns about the poor quality of schools in some rural areas.

### Vietnamese Farmers have Small Landholdings and Landlessness is Rising

3.25 An early and strong commitment by the government to distribute land use rights equitably among farmers in Vietnam has resulted in a pattern of land distribution that remains remarkably equitable by international standards. Rural growth and on-farm diversification were the driving forces for poverty reduction in the 1990s. Most rural households continue to have small landholdings and, in recent years, few households were able to substantially improve their living conditions through expanded cultivation of annual crops. A high percentage of Vietnamese farmers continue to grow rice, in part driven by state restrictions on the use of land. Land use restrictions are primarily in place for rice production, and affect land in the Mekong and Red River Deltas (Markussen, Tarp, and van den Broeck 2009). Except in the Mekong Delta, rice is grown primarily for own consumption rather than as a source of cash income. 72 percent of poor households in Vietnam grew rice according to the 2008 VHLSS; 90 percent of this rice consumed at home, and only 18 percent of poor households were net sellers of rice. Instead, rising wealth among rural households is linked to on-farm diversification into cash crops, and even more important, diversification into off-farm activities. The last decade is notable for rapidly expanding opportunities for stable off-farm income generation, including in industrial centers and nearby towns.

3.26 Less-well-off rural households cultivated, on average, more land than better-off rural households in 2010 (Table 3.10). However, these statistics should be interpreted with care; much of the land cultivated by ethnic minorities is in upland regions and often of lower quality due to sloping and rocky terrain and lack of dependable irrigation. Better-off households cultivate more perennial cropland, which is used for commercial activities (including coffee, an important cash crop).

**Table 3.10 Average Landholdings for Rural Households in 2010, by Consumption Quintile**

	Quintile				
	1	2	3	4	5
All land (sq. m.)	8235	6049	5901	5723	5608
of which:					
Annual crop land	3765	3322	2927	2826	2302
Perennial land	698	1031	1145	1640	2463

Source: 2010 VHLSS.

3.27 The proportion of landless rural households has risen in all regions since the late 1990s (Table 3.11). However, with the exception of the Mekong Delta, landlessness is not associated with higher poverty. In fact, initial analysis suggests a positive relationship between rural landlessness and wealth in most regions in the north of Vietnam. (Table 3.12). But 54 percent of the rural poor living in the Southeast region and 48 percent of the rural poor living in the Mekong Delta are landless (landless rates among extreme poor are similar). Concerns have been raised over the years about the links between landlessness and poverty. Some were concerned that legislation allowing the opening up of land markets in the late-1990s would encourage poor farmers to sell land for quick profits, leaving them without adequate means of livelihoods; others argued that land markets would promote greater efficiency. (Ravallion and Van der Walle 2008a, 2008b) The picture is mixed. Respondents living in Tra Vinh province in the Mekong Delta interviewed for the positive deviance study (Chapter 1) noted expanding opportunities for “land-poor” households in the Mekong and Southeast to diversify into higher paid off-farm activities. However, off-farm diversification requires relevant education and skills. Although young workers can acquire these skills, the situation is more complicated for households with older workers. More work is needed to understand the complex links between landlessness and poverty in Vietnam’s southern provinces.

**Table 3.11 Percentage of Rural Households without Allocated or Swidden Land,**

	1993	1998	2010
Northern Mountains	2.0	3.7	8.1
Red River Delta	3.2	4.5	13.4
North Central Coast	3.8	7.7	15.5
South Central Coast	10.7	5.1	19.7
Central Highlands	3.9	2.6	17.3
Southeast	21.3	28.7	58.9
Mekong Delta	16.9	21.3	33.6
National	8.2	10.1	22.5

Source: 1993 and 1998 figures taken from the World Bank 2000 Vietnam Development Report, table 2.4. 2010 figures are World Bank estimates from 2010 VHLSS.

Note: Swidden land is land cleared for cultivation by cutting and burning the vegetation.

“Land” includes annual cropland, perennial cropland, forestry land, water surface, and shifting-cultivation farmland. It excludes gardens, ponds, and land classified as “other.”

**Table 3.12 Percent of Rural Households without Allocated or Swidden Land in 2010, by Region and Quintile**

	Extreme poor	Quintile				
		1	2	3	4	5
Red River Delta	2.2	4.6	4.8	7.9	14.6	30.5
East Northern Mountains	0.7	2.2	4.8	9.6	20.9	31.4
West Northern Mountains	0.5	0.6	5.3	5.5	38.7	56.9
North Central Coast	7.9	7.9	9.9	14.9	22.6	52.0
South Central Coast	2.5	10.6	14.6	16.7	21.7	25.3
Central Highlands	13.2	9.6	17.0	27.6	21.1	23.9
Southeast	43.4	53.9	43.4	53.6	56.5	68.5
Mekong River Delta	50.3	47.5	29.0	29.7	30.6	34.9

Source: 2010 VHLSS.

## F. Housing and Local Infrastructure have Improved Substantially since the Late 1990s

3.28 Housing conditions are an important measure of quality of life, both as ends in themselves and as means toward achieving better living standards. For example, access to sanitation interacts with health care, good nutrition, and water supply to influence the health of individuals. Homes built with more durable building materials provide safer shelter and reduce labor costs for repairs and new construction.

3.29 Vietnam has achieved widespread improvements in the quality of housing and access to infrastructure in recent years. These are evident in recent rounds of the VHLSS, and were also reported in supporting field studies. For example, respondents in the long-run drivers of poverty reduction study (Nguyen and Hoang 2012) describe substantial improvements in rural infrastructure since the early 1990s and increased access to associated social and economic services, markets, and information. These include better road and bridge access for rural communes and remote villages, new irrigation facilities, and a rapid expansion of media services and technologies into rural areas. Associated with this, many households have invested in new types of assets that improve mobility and access to information, including motorbikes, TVs, mobile phones, and even computers in urban areas. These widespread improvements in economic and social infrastructure have resulted from the combined efforts of many government infrastructure investment programs across the different infrastructure sectors, and provide a good foundation for growth of the rural economy and continued reductions in rural poverty in the coming years.

3.30 Although the poor still own fewer durable goods than better-off households, the comparative statistics in table 3.13 indicate substantial increases in durable goods ownership since 1998. For example, in 2010, 51 percent of the poor owned a motorbike compared to 2 percent in 1998; 74 percent owned a TV compared to 30 percent in 1998; and 46 percent owned a rice cooker or electric stove compared to 1 percent in 1998, and 37 percent owned a mobile phone. The extreme poor owned very little in 1998, but by 2010, 40 percent owned a motorbike, 61 percent owned a TV, 28 percent owned a rice cooker or stove, and 24 percent owned a mobile phone. Wider access to transport, TVs, and mobile phones has improved the spread of information and helped the poor to become less socially isolated and more integrated with the wider economy.

**Table 3.13 Household Ownership Rates of Durables in 1998 and 2010 (Percent)**

	National		Poor		Extreme Poor	
	1998	2010	1998	2010	1998	2010
Car	0.2	1.3	0.0	0.0	0.0	0.0
Motorbike	20.3	75.9	2.4	50.9	0.4	39.6
Mobile phone	--	69.8	--	37.1	--	24.2
TV	55.7	89.3	30.2	73.6	11.9	61.3
Computer	0.7	16.8	0.0	0.3	0.0	0.4
Refrigerator or freezer	9.0	42.6	0.0	5.3	0.0	2.2
Air conditioner	0.7	8.2	0.0	0.1	0.0	0.2
Electric fan	68.4	85.2	45.9	65.2	26.3	49.4
Rice cooker or electric stove	19.3	77.6	1.1	45.6	0.0	28.3

Source: 2010 VHLSS.

3.31 Despite improvements, many of the poor still do not have access to clean water (36 percent of households in the bottom quintile, 14 percent in the second quintile) or adequate sanitation (21 percent of households in the bottom quintile and 8 percent in the second quintile do not have flush or semi-flush toilets). Although Vietnam has done a remarkable job at making electricity widely available (more than 95 percent of households are connected to the grid) and improving the reliability of supply, 11 percent of households in the bottom quintile are still not connected to the electricity grid. Many of the households without access to clean water, adequate sanitation, and electricity are ethnic

minorities living in less accessible upland regions of Vietnam (Table 3.14). As described in Chapter 1, these households are deprived not only in income terms, but also in terms of access to public goods and services.

**Table 3.14 Percentage of Households with Access to Housing and Neighborhood Amenities in 2010, by Quintile**

	Quintile					Total
	1	2	3	4	5	
Tap water	7.5	13.3	21.7	32.8	59.2	26.9
Clean (nontap) water	56.4	72.8	71.2	62.3	39.7	60.5
Flush toilet	12.8	31.2	48.4	67.6	88.7	49.7
Semi-flush toilet	66.0	61.3	46.8	30.7	10.9	43.1
Solid house	12.0	19.7	26.9	34.5	62.5	31.1
Semisolid house	64.9	66.2	64.7	60.7	36.3	58.6
Household with electricity	89.0	97.9	99.4	99.3	99.6	97.0

Source: VHLSS 2010.

## G. Urban Poverty is Low According to GSO-WB Estimates, and Concentrated in Smaller Cities and Towns

3.32 The poverty rate in urban areas is only 6 percent compared to 27 percent in rural areas. Because only 30 percent of the Vietnamese population lives in urban areas, the urban poor comprise only 8.6 percent of the total poor in Vietnam.

3.33 Although poverty in Vietnam is primarily a rural phenomenon, understanding and addressing urban poverty is increasingly important. Vietnam is urbanizing rapidly; the urban population grew by 3.4 percent per year between 1999 and 2009 compared to an annual population growth rate of only 0.4 percent in rural areas. The urban population is forecast<sup>21</sup> to reach 45 percent of the total population by 2020—a major increase over the 30 percent registered in the 2009 Housing and Population Census. In light of this rapid change, it is vital to better understand the factors that influence the living conditions of low-income urban households, including how poverty is distributed across urban areas.

3.34 City size is one important correlate of poverty. The sample size of the 2010 VHLSS is too small to estimate poverty rates for different types of cities. Instead, the poverty mapping methods described in Chapter 4 were used to estimate poverty rates by city size, ranging from very large “special cities” (for example, Hanoi and Ho Chi Minh City) to small Class 5 cities, which include district towns with 4,000 or fewer inhabitants. Table 3.15 presents poverty statistics by city size ranging from extra-large (that is, Hanoi and Ho Chi Minh City) to extra-small Class 4 and 5 towns.

3.35 Poverty levels decrease with city size; if measured by the 2010 GSO-WB poverty line,<sup>22</sup> only 1.9 percent of the population in the largest cities is poor, while the poverty rate in the smallest cities is 11.2 percent. Poverty depth (the poverty gap) and poverty severity (the squared poverty gap) also decrease with city size. The urban poor are overwhelmingly concentrated in small cities and towns; small and extra small cities account for only 43 percent of the urban population but over 70 percent of the urban poor. Conversely, 32 percent of Vietnam’s urban population lives in Hanoi and Ho Chi Minh City, but only 11 percent of the urban poor live in these two cities.

21 Ministry of Construction plan, as part of Decree 10/1998/QD-TTg, 1998.

22 Several of Vietnam’s largest cities have developed their own poverty lines; for instance, Hanoi recently announced a new poverty line of 750,000 VND per person per month for the 2011–2015 Socio-Economic Development Plan, and the poverty line used by Ho Chi Minh City is 1,000,000 VND per person per month.

**Table 3.15 Poverty by City Size**

	Extra-Large	Large	Medium	Small	Extra-Small	Rural
City class	Special City	Class 1	Class 2	Class 3	Class 4, 5	
Number of cities in category	2	7	14	45	634	
Average population (000)	4,075	467	225	86	11	
% of total population	9.5	3.8	3.7	4.5	8.1	70.4
% of urban population	32.1	12.9	12.4	15.3	27.3	
Poverty rate (%)	1.9	3.8	4.2	5.8	11.2	25.6
Poverty gap (%)	0.4	0.6	0.7	1.1	2.4	6.8
Share of urban poor (%)	11.0	8.8	9.2	5.9	55.0	

Source: World Bank estimates.

3.36 Smaller cities can be thought of as more “rural” than larger cities; urban poverty is concentrated in the more “rural-like” urban areas. This is consistent with the stylized facts presented earlier in the chapter; the poor in Vietnam overwhelmingly live in rural areas. And indeed, smaller cities are more rural-like than larger cities in more aspects than just population. Table 3.16 provides an overview of housing and local services, also education levels of urban residents, categorized by city size and for rural areas. Although access to electricity is universal across all city types, smaller cities lag the larger ones in most other basic services. Use of gas for cooking is less common, use of firewood for cooking is more common, and access to piped water is much less common in smaller cities and towns. In fact, a group of smaller cities report having no access to piped water at all. Similarly, fewer households in small cities have flush toilets and substantial numbers use firewood instead of gas for cooking. Smaller cities and towns also lag larger cities in the education level of the household head.

**Table 3.16 Percent of Households with Specific Characteristics, by City Size**

	Extra Large	Large	Medium	Small	Extra Small	Rural
Primary education	20.2	21.8	20.7	23.7	26.2	30.0
Secondary education	19.0	21.0	20.5	20.1	22.6	27.0
Tertiary education	49.7	41.7	46.5	40.1	30.6	14.9
Dwelling walls of solid material	98.2	90.6	92.4	86.7	79.9	69.5
Dwelling walls of semisolid material	1.2	4.5	5.0	8.4	11.9	16.0
Dwelling walls of temporary material	0.6	4.9	2.6	4.9	8.2	14.5
Dwelling roof of solid material	35.1	21.5	25.2	19.5	17.9	13.4
Dwelling roof of semisolid material	6.0	11.5	18.1	20.7	26.6	39.6
Dwelling roof of temporary material	58.8	67.0	56.8	59.8	55.5	47.1
Has flush toilet	99.3	89.6	92.7	82.9	69.6	38.8
Has other kind of toilet	0.5	9.9	5.0	14.6	24.9	50.4
Has no toilet	0.2	0.5	2.3	2.5	5.5	10.9
Drinks water from pipe	74.2	74.3	75.5	57.2	33.6	8.0
Drinks water from well	25.3	15.9	21.3	35.6	52.2	58.3
Drinks water other source	0.6	9.9	3.2	7.2	14.2	33.8
Uses electricity for lighting	99.7	99.7	99.8	99.6	99.0	94.1
Uses electricity for cooking	2.1	1.4	1.1	1.9	1.8	1.5
Uses gas for cooking	89.3	70.7	75.5	66.9	55.6	22.9
Uses firewood for cooking	0.7	12.0	7.2	15.7	32.2	64.6

Source: World Bank estimates from 2009 Population Census.

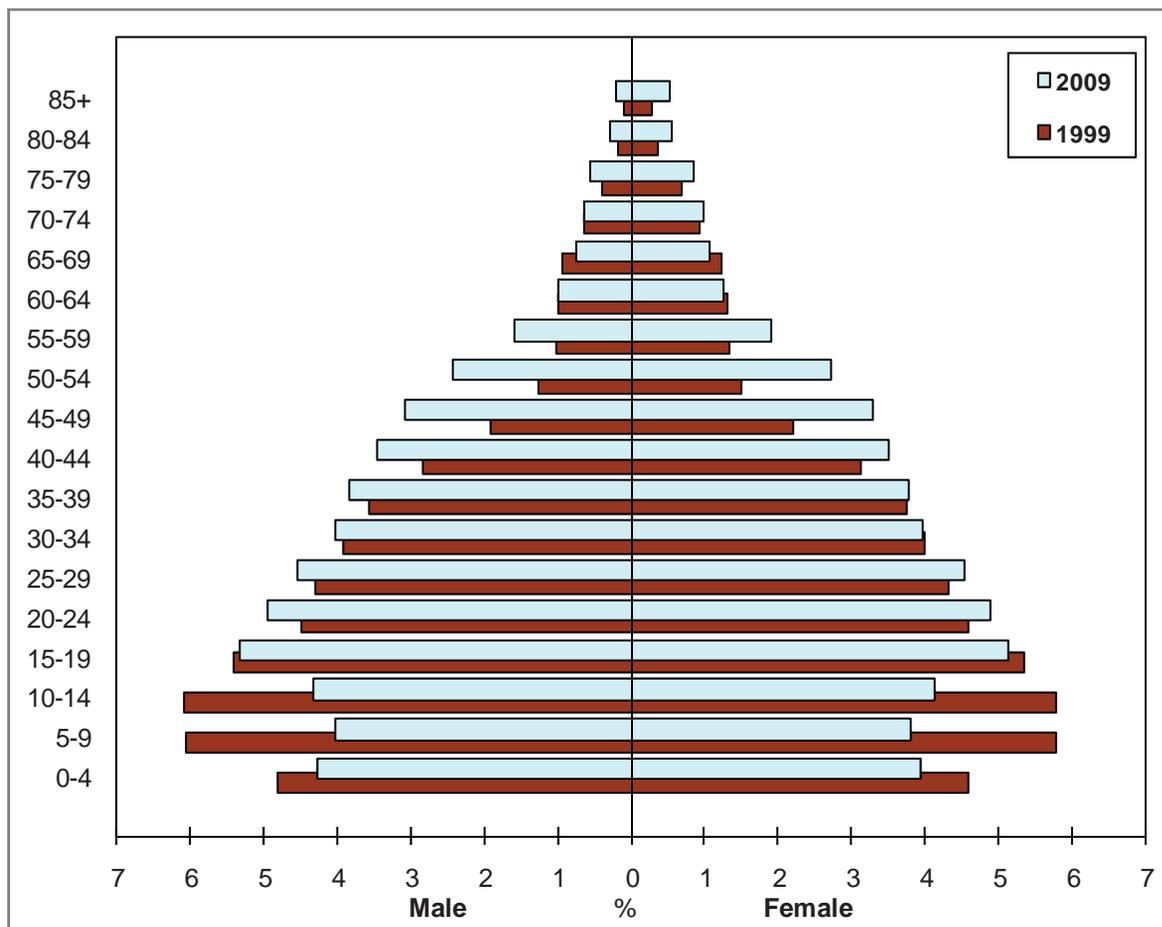
Note: Education level is highest attainment of the household head.

## H. Poverty has Become Less Correlated with Demographic Factors, although Aging is Emerging as an Issue and Child Poverty Remains a Concern

3.37 Compared to the 1990s, demographic factors such as high dependency ratios and female headship have become less linked to poverty. Comparisons between 1999 and 2009 population “pyramids” for Vietnam (GSO 2010) highlight the sharp reduction in the proportion of children in the population and an increase in the proportion of older adults. Recent qualitative studies (e.g. the long-run drivers of poverty reduction study; Nguyen and Hoang 2012) identify important links between changing household structures and the dynamics of income and well-being. The nationwide family planning campaign, active since the late 1980s, were widely acknowledged at all field sites as having made an important contribution to poverty reduction. Most couples (nearly 80 percent according to the 2010 VHLSS) now have only two children, which helps reduce household spending on basic services like education and health and allows for more “quality” spending on children.

3.38 The long-run drivers study, with its two-decade reference period, also identified several positive impacts for families that had more children. The Vietnamese economy has been expanding and creating new jobs. Although poor rural households struggled to raise and educate children born in the 1980s and early 1990s, these children are now grown, and many are working in off-farm activities or have migrated to work in urban areas. Rather than being a burden, they contribute to supporting their parents and younger siblings who stay home.

**Figure 3.12 Population Pyramids for Vietnam: 1999 and 2009**



Source: GSO 2010.

3.39 Female-headed households with children were identified in a number of sites as more vulnerable to and at risk for poverty, in large part because they were dependent primarily on the earnings of the female household head. Many respondents felt that two parents are required to work to support a family in Vietnam. Moreover, men in rural areas are better paid than most women because they take on different (heavier and more dangerous) tasks. Single mothers struggle with the lack of adequate daycare facilities, particularly in rural areas, and may not receive support from extended family.

3.40 Aging is another important source of vulnerability. Vietnam has a high proportion of widows; according to the 2010 VHLSS, 19 percent of households include a widow, and 12.5 percent are currently headed by a widow. The proportion of widows in an age cohort rises sharply with age: 47.6 percent of women aged 66-70 are widowed compared to only 9.7 of men in the same age cohort; 67.6 percent of women aged 76-80 are widowed compared to 24.5 percent of men in the cohort. Participatory Poverty Assessments (PPAs) and recent qualitative studies carried out, for instance, by Oxfam, highlight the vulnerability of households headed by elderly persons, and in particular widows, in part linked to the limited coverage of social insurance and pensions for Vietnam's aging population (UNFPA 2011). Vulnerability linked to aging is a growing challenge in Vietnam, and additional research on the links between poverty, vulnerability, and aging is needed.

### Aging and Economies of Scale in Consumption

3.41 New work on aging and household economies of scale and composition was carried for this report to address the concern that conventional poverty profiles based on per-capita consumption tend to underreport poverty among small households (particularly those with only elderly members) and over-report poverty among large households (including those with many children). The study explores different methods to adjust for economies of scale (size) in household welfare (measured in terms of per-capita consumption). While some types of consumption such as food are more directly a function of household size (although young children eat less than adults), other types like electricity and housing are fixed costs and less directly linked to household size. To adjust for economies of scale, individual welfare is redefined as

$$y^* = \frac{Y}{(N)^\theta}$$

Where Y is total household expenditures, N is the number of household members, and  $\theta$  is a scale parameter, which ranges from 1 to 0. When  $\theta = 1$ , individual welfare is equal to per-capita expenditures (no economies of scale). Engel curve analysis undertaken as part of the study suggest that moderate scale economies hold for Vietnam (that is,  $\theta = .68$ ).

3.42 Table 3.17 presents poverty rates for different demographic groups and different household demographic compositions using conventional per-capita expenditure measures ( $\theta = 1$ ) and moderate ( $\theta = 0.8$ ) and more substantial ( $\theta = 0.6$ ) adjustments for economies of scale. Using conventional measures, we see the standard results: higher poverty than the national average for minority households and for large households with more dependents (two or more children). Households with three or more children (around 10 percent of households in 2010) are more likely to be poor even after adjusting for economies of scale. Child poverty, therefore, remains an important concern. In addition, although low in absolute numbers at present, small households with elderly members emerge as a new group of vulnerable/poor as we adjust progressively for economies of scale. The number of these households is likely to increase as the population ages and Vietnam becomes more urbanized. Ongoing efforts to develop a modern social protection system for Vietnam should keep (single) elderly and widow/widower households in sight as target populations deserving special attention.

**Table 3.17 Demographic Characteristics and Scale Economies for the Poor**

	% Population	Household size	Percent Poor		
			$\theta = 1$	$\theta = 0.8$	$\theta = 0.6$
<b>All households</b>	100.0	4.5	20.7	21.2	
No widow	81.0	4.4	20.3	20.5	
With widow	19.0	4.8	23.6	24.1	25.2
Female-headed	24.8	4.0	14.9	16.5	18.2
Male-headed	75.2	4.6	22.6	22.5	23.0
Widow-headed	12.5	4.1	21.5	23.2	26.0
Ethnicity = Kinh	82.2	4.4	13.2	13.4	14.3
Ethnicity = not Kinh	17.8	5.1	62.2	63.0	62.9
<b>Household Composition</b>					
Single adult	0.7	1.0	4.0	11.3	19.9
Single elderly/widow/ widower	0.7	1.0	14.9	29.6	51.1
2 adults	3.8	2.0	6.8	10.9	16.9
Single parent	0.6	2.0	21.4	26.7	34.5
2 elderly	1.2	2.0	22.3	31.9	46.0
Other 2-member household	1.2	2.0	17.0	23.6	34.3
Nuclear 1 child	6.5	3.0	14.0	16.8	19.3
Nuclear 2 children	14.0	4.0	25.1	26.8	28.3
Nuclear 3+ children	5.3	5.3	47.3	45.1	42.9
Extended family no children	20.4	3.9	8.7	9.7	11.1
Extended family 1 child	19.9	4.8	15.0	14.8	15.1
Extended family 2 children	12.0	5.6	26.2	24.0	22.2
Extended family 3+ children	4.7	7.5	56.3	52.4	46.7
Joint family no elderly	6.0	5.7	29.9	26.4	24.0
Joint family with elderly	3.0	6.0	20.9	18.4	17.0

Source: World Bank estimates.

### Child Poverty Rates Remain High, and Children Face Multiple Deprivations that could impact their Long-term Development <sup>23</sup>

3.43 Children face a higher risk of poverty than adults, and poverty affects them differently. They have different dietary requirements, for example, and the role of education is vital at this stage of life. A child-specific approach to measuring poverty can highlight and emphasize those needs that are especially crucial for children and their development, and enable more effective poverty reduction objectives, strategies, and policies.

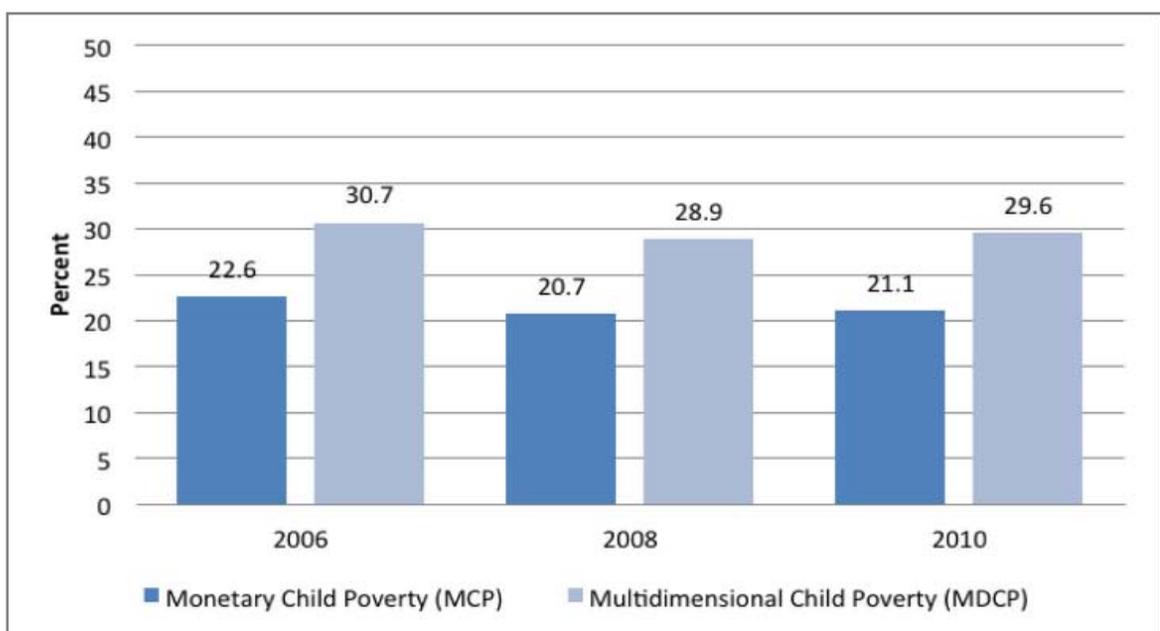
3.44 The most common approach to measuring child poverty examines income and/or expenditures at a household level. According to the 1998 VLSS, 47.2 percent—nearly half—of all children lived below the original GSO-WB poverty line. By 2010, this figure had fallen to 29.2 percent. Extreme child poverty fell more slowly—from 16.8 percent in 1998 to 12.5 percent in 2010. Furthermore, in households with three or more children, child poverty remains high, as noted in the previous section. But the monetary approach to measuring child poverty reflects only one dimension of well-being, and does not capture the intra-household distribution of resources. The conventional methodology has thus been extended to assess child poverty along additional dimensions.

23 Information in this section was provided by UNICEF/Hanoi.

3.45 In 2008, MOLISA and UNICEF developed a Vietnam-specific multidimensional poverty measurement approach, based on the Convention on the Rights of the Child. The approach incorporates eight poverty domains, including deprivations in education, nutrition, health, shelter, water and sanitation, child labor, leisure, and social inclusion and protection. Poverty prevalence can be calculated for any one of these domains, and a multidimensional child poverty rate (MDCP) constructed to measure the percentage of children who are poor in at least two domains. This methodology has been applied to the 2006, 2008, and 2010.

3.46 UNICEF’s monetary child poverty rate (MCP) measures the proportion of children living in households whose welfare levels fall below the GSO-WB poverty line. In contrast, the MDCP identifies the proportion of children suffering from deprivation in at least two of the eight selected domains. The MDCP is systematically higher than the MCP, indicating that around one-third of children living in Vietnam—or an estimated 7 million children—are considered multidimensionally poor, in contrast to around one in five who are poor according to conventional income or expenditure criteria. (figure 3.13)

**Figure 3.13 Monetary and Multidimensional Child Poverty in Vietnam, 2006-10**

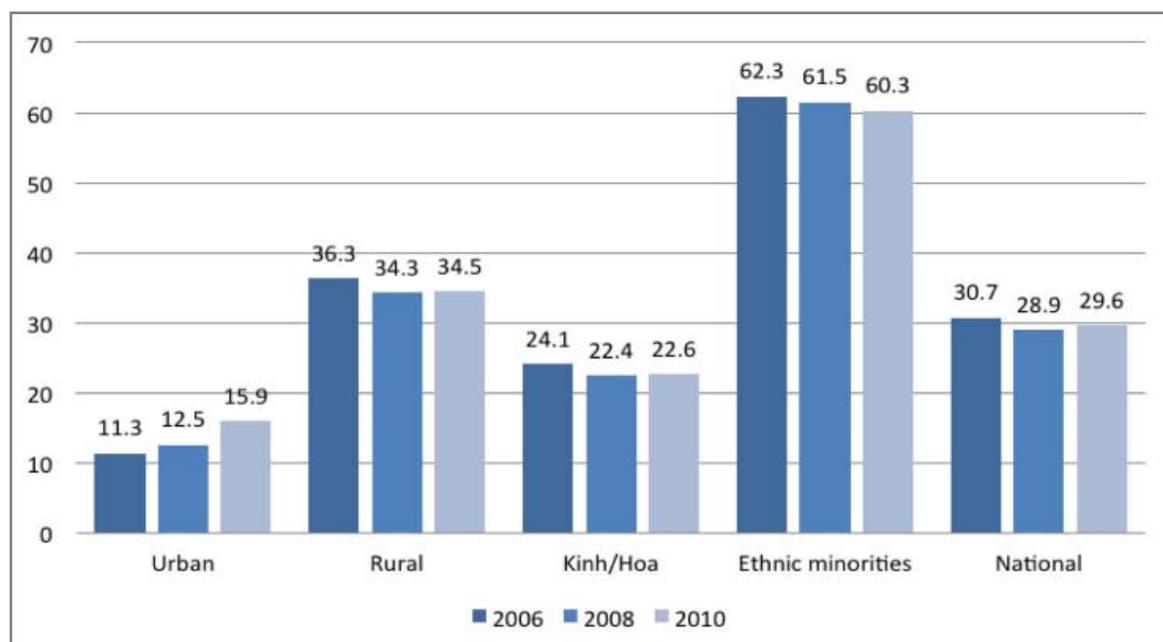


Source: 2006, 2008, 2010 VHLSS.

3.47 A deeper analysis of the degree of overlap between the MCP and the MDCP reveals that the methods identify different groups of children. While some children are identified as poor according to both methods, there is also a group that is only identified as poor by the multidimensional approach, and likewise for the monetary approach. Using the 2006 VHLSS data, GSO and MOLISA estimate that 18 percent of children are captured exclusively by the MDCP and would not have been considered poor by the MCP. This result underlines the stark difference between child and overall poverty and the importance of a multidimensional measure to complement the standard monetary measurement of poverty.

3.48 Figure 3.14 indicates the disparities that exist among subgroups of the national population. The MDCP declined for both ethnic categories from 2006 to 2010, but children from ethnic minority households are still almost three times more likely to be multi-dimensionally poor than their Kinh/Hoa peers. The figures also provide evidence of a significant urban-rural divide; children in rural areas are twice as likely to be multi-dimensionally poor than children in urban areas. While child poverty in rural areas has shown some decline in recent years, the MDCP indicates that urban poverty is rising.

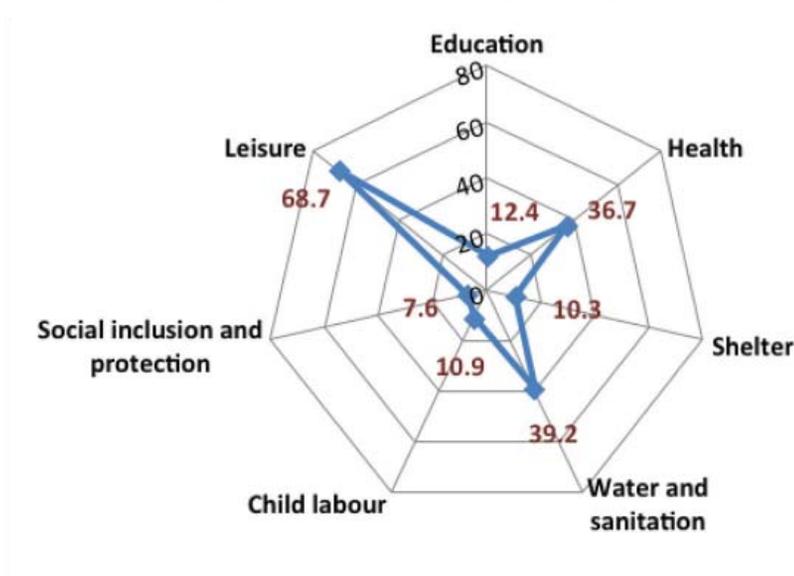
**Figure 3.14 Multidimensional Child Poverty in Vietnam by Selected Sociodemographic Variables, 2006-2010**



Source: 2006, 2008, 2010 VHLSS.

3.49 Figure 3.15 provides a breakdown by domain of the MDCP for 2010. Health, water and sanitation, and leisure are clearly the domains of most concern. These figures indicate that more than one in three children aged 2 to 4 (36.7 percent) was not fully immunized and had not visited a health facility in the prior 12 months (health); almost two out of five aged 0 to 15 (39.2 percent) lived in dwellings without hygienic sanitation or safe drinking water (water and sanitation); and more than two out of three children aged 0 to 4 did not have any toys or books (leisure).

**Figure 3.15 Child Poverty Rate by Domain, 2010**



Source: 2006, 2008, 2010 VHLSS.

## I. Poor Households are Still Vulnerable to Weather Shocks

3.50 Located in one of the earth's five typhoon centers, Vietnam is prone to natural disasters, including frequent tropical storms and flooding. The 2008 VHLSS collected information on whether households had experienced weather shocks between 2003 and 2008 and the types of shocks. Results are presented in Table 3.18. Households in rural areas are much more likely to experience weather shocks than their urban counterparts, and the poor are more exposed to shocks than the nonpoor. Households in the Central Highlands are more likely than those in any other region to experience droughts, while those in the Central Coastal regions are most likely to experience storms or flooding. (Le, Nguyen, and Phung 2012).

**Table 3.18 Percent of Households Experiencing Natural Disasters, 2003-08**

	Drought	Flood, storm	Landslide	Other forms of extreme weather
National	6.7	12.9	0.7	15.2
Rural	8.6	15.5	0.9	19.4
Urban	1.8	6.3	0.1	4.3
Red River Delta	2.6	10.3	0.4	28.6
East Northern Mountains	9.4	7.0	1.7	23.0
West Northern Mountains	8.1	14.3	1.3	22.6
North Central Coast	15.8	29.3	1.1	30.3
South Central Coast	7.3	25.9	0.4	7.4
Central Highlands	19.2	10.9	0.4	4.9
Southeast	2.9	5.1	0.3	1.3
Mekong River Delta	3.5	10.2	0.5	1.4
Poor	14.2	17.9	1.2	22.9
Non-poor	5.6	12.2	0.6	14.1

Source: 2008 VHLSS.

## J. Limited Coverage is Provided by Existing Poverty Reduction and Social Protection Programs

3.51 This report focuses on diagnostics. Follow-up work on policy and program implications is planned, including on the design and targeting of social protection and poverty reduction policies and programs. Access to poverty reduction programs and policies is an important aspect of well-being for low-income households. But concerns have been raised about both the targeting and coverage of Vietnam's existing poverty reduction programs. These issues are examined briefly using information collected in the 2010 VHLSS: each round of the survey includes information on whether households have been formally classified as poor—that is, whether they are on the official MOLISA poverty list—and thus eligible for benefits under existing government programs, most notably the National Targeted Program for Sustainable Poverty Reduction (NTP-SPR). Each round of the VHLSS also includes information on whether the household received program benefits. This information can be used to assess coverage and targeting of Vietnam's poverty programs.

3.52 Analysis suggests that coverage is problematic (a substantial number of households that should be on the poverty list are not) but targeting is less of a concern (most households on the list are from the poorest groups). Note, however, that the 2010 VHLSS data were collected before the government implemented the poverty census for the 2011–2015 Socio-Economic Development Plan and used this information to update the official poverty list. Thus, while the official poverty rate for 2010 is 14.2 percent, only 10.6 percent of households surveyed in the 2010 VHLSS reported being on the (old) MOLISA poverty list.

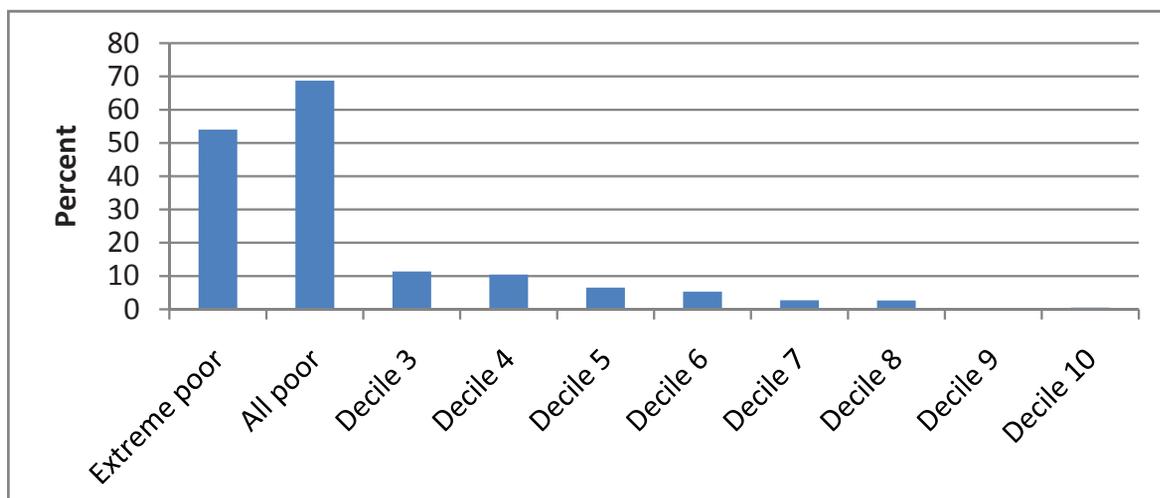
3.53 Table 3.19 shows the percentage of households (by expanded expenditure quintile) that reported being classified as poor by commune authorities, and are thus on the official MOLISA poverty list. 8 percent of individuals in the 2010 VHLSS are classified as extreme poor by the updated GSO-WB poverty line. However, only 52 percent these households said they were on the official poverty list. Similarly, 20.7 percent of individuals were classified as poor using the updated GSO-WB poverty line, but only 36 percent of these households said they were on the official poverty list. Thus coverage is low, but leakage of benefits to the non-poor is modest; only 12.2 percent of households in the second quintile and 6.3 percent of households in the third quintile said they were on the official poverty list.

**Table 3.19 Percentage of Households Officially Classified as Poor, by Expanded Quintile, 2010**

	<b>2010</b>
Extreme poor	52.0
All poor	36.0
Quintile 2	12.2
Quintile 3	6.3
Quintile 4	2.6
Quintile 5	0.4

3.54 Figure 3.16 describes in greater detail how households on the poverty list are distributed across the welfare distribution. The great majority—nearly 70 percent—of households are also classified as poor using the GSO-WB poverty line. Only 11.5 percent of those officially classified as poor are in the upper half of the welfare distribution. While there is room for improvement, these targeting results are better than in many other countries, where program benefits are frequently captured by better-off households and rural elites. This being said, there are clearly problems with program coverage, including coverage of the poorest households. Deeper analysis of coverage and targeting at the regional level indicates that coverage is lower in high-poverty provinces, such as in the North West and North East, and higher in some better-off provinces and urban areas. MOLISA may face pressure to spread program benefits more equitably across provinces; given the increasing concentration of the poor in high-poverty regions, this would lead to reduced program coverage.

**Figure 3.16 Distribution of Population on the Official Poverty List by Expanded Per-Capita**



### Expenditure Quintile, 2010

3.55 Table 3.20 looks in detail at the coverage of Vietnam's various social protection and poverty reduction policies for households classified by expanded expenditure quintile (Nguyen and Vu 2012). Coverage rates are low in general and social insurance programs are not well targeted to the poor. Few households reported receiving vocational training in 2010. Analysis of the coverage of social assistance measures presents a more nuanced picture. Many of the policies included under the National Target Program for Sustainable Poverty Reduction are well-targeted toward the poor (for example, education fee reductions and subsidies, production support, food support) but, consistent with the analysis above, the coverage of these programs is very low. In general, less than a third of the extreme poor were covered by these poverty reduction policies in 2010. Health coverage (free health cards) is better, but benefits accrue to households across the welfare distribution.

**Table 3.20 Coverage of Social Protection and Poverty Reduction Policies by Expanded Quintiles**

Percentage of People in Households Receiving:	Extreme						
	Total	Poor	All Poor	Quintile 2	Quintile 3	Quintile 4	Quintile 5
All transfers and programs	72.6	88.8	77.2	68.1	67.8	70.6	74.5
All social insurance	32.1	11.2	14.3	20.4	28.0	41.1	58.1
Employment subsidy	1.5	1.2	0.8	1.3	1.6	1.8	1.7
Pension	9.2	2.9	2.2	5.4	7.0	11.6	19.5
Having social insurance	26.7	7.5	11.9	15.6	23.4	34.1	50.0
Vocational training	0.1	0.2	0.3	0.2	0.0	0.0	0.0
All social assistance	56.6	87.4	72.0	60.6	54.7	47.9	41.0
Allowances for veterans, merit households	4.0	2.9	2.8	5.2	4.8	4.6	2.6
Allowances for policy households	4.9	11.8	8.8	5.0	4.1	3.3	1.6
Health subsidy allowances	32.7	29.6	31.3	34.3	34.9	29.8	33.7
Education subsidy allowances	8.3	36.0	15.0	7.6	4.0	4.2	2.3
Allowance for recovery from disaster, fire	4.9	7.4	6.7	7.4	5.7	3.8	1.0
Loan from Vietnam Bank for Social Policies	13.1	33.7	25.6	14.2	10.3	8.6	3.2
Health program	12.0	54.7	29.3	11.9	5.2	2.3	0.7
Education fee reduction and exemption	5.5	25.8	14.9	5.4	1.9	0.7	0.1
Housing program	1.1	4.4	2.9	1.3	0.4	0.2	0.0
Cultivation land for ethnic minorities	0.1	0.1	0.5	0.3	0.0	0.0	0.0
Agricultural extension	7.8	25.5	14.4	7.3	6.1	4.7	1.9
Clean water	1.9	9.1	4.5	2.1	0.6	0.5	0.2
Food supports	5.2	24.9	10.4	5.6	2.0	1.9	0.2
Production support	9.0	27.9	14.5	9.0	8.0	5.6	2.1

Source: Nguyen and Vu 2012.

3.56 Table 3.21 presents similar estimates stratifying for urban versus rural households, also for Kinh majorities and ethnic minorities. Minorities report substantially lower coverage of social insurance programs, albeit greater access to NTP-SPR support, and greater access to social assistance

programs more generally. Higher coverage is not surprising given the very high poverty rates among ethnic minorities.

**Table 3. 21 Coverage of Social Protection and Poverty Reduction Policies by Urban/Rural and Ethnicity**

Percentage of People in Households Receiving: Ethnic		Total	Urban	Rural	Kinh/Hoa
					Minorities
All transfers and programs	72.6	75.3	71.5	70.3	86.1
All social insurance	32.1	56.2	22.0	35.2	14.0
Employment subsidy	1.5	2.0	1.3	1.6	0.8
Pension	9.2	17.9	5.5	10.1	4.0
Having social insurance	26.7	48.9	17.3	29.3	11.0
Vocational training	0.1	0.0	0.1	0.0	0.6
All social assistance	56.6	44.0	61.9	52.2	82.0
Allowances for veterans, merit households	4.0	2.6	4.6	4.2	2.4
Allowances for policy households	4.9	2.3	5.9	4.1	9.4
Health subsidy allowances	32.7	31.9	33.0	33.0	30.7
Education subsidy allowances	8.3	3.5	10.3	4.1	32.7
Allowance for recovery from disaster, Fire	4.9	1.3	6.4	4.8	5.6
Loan from Vietnam Bank for Social Policies	13.1	6.8	15.8	9.7	33.2
Health program	12.0	3.4	15.6	6.4	44.1
Education fee reduction and exemption	5.5	1.8	7.1	3.2	18.8
Housing program	1.1	0.2	1.5	0.4	4.8
Cultivation land for ethnic minorities	0.1	0.0	0.2	0.0	0.8
Agricultural extension	7.8	1.1	10.6	4.7	25.9
Clean water	1.9	0.2	2.7	0.6	9.7
Food supports	5.2	1.4	6.8	2.8	19.1
Production support	9.0	1.4	12.1	6.0	26.2

Source: VHLSS 2010.

Notes: Program coverage is the portion of population in each group that receives the transfer. Specifically, coverage is (number of individuals in the group who live in a household where at least one member receives the transfer) / (number of individuals in the group). Program coverage is calculated setting as the expansion factor the household expansion factor multiplied by the household size.

Source: Nguyen and Vu 2012.

## Chapter Annexes

### Annex 3. 1 Overview of Vietnam's Eight Economic Regions

Vietnam's eight regions include the North East, the North West, the Red River Delta, the North Central Coast, the South Central Coast, the Central Highlands, the South East, and the Mekong River Delta.

The *North East* lies to the north of the Red River Delta. It includes nine provinces, with a population of 8.2 million. The Viet (Kinh) people make up the majority, with the exception of where a number of minority groups reside. Economic development in the region is mainly based on mining, especially coal and various minerals, forestry, perennial crops, vegetables, and tourism at sites like Ba Be lake, Tam Dao, and Ha Long Bay.

The *North West* is in the mountainous northwestern part of the country, bordering China and Laos. It covers six provinces, with a population of 4.2 million. The Thai people make up the majority, but more than 20 other ethnic groups live in North West region. High mountains make communications difficult. The economy is based on agriculture and industrial crops such as tea and maize. The soil contains various minerals that have not yet been exploited.

The *Red River Delta's* population is 18.8 million inhabitants, a majority of which (96.2 percent) are Viet people who live in 10 provinces. The region is the economic, political, and cultural center of the country, with the capital Hanoi and the port of Haiphong. The economic engines are industrial production and services. It is also the second- largest rice producer of the country.

The *North Central Coast* has about 10.1 million inhabitants consisting of 25 ethnic groups the majority of which are Viet people. The region is located between the Lao border and a long coastal line. It offers good conditions for overseas trading and tourism.

The *South Central Coast* encompasses eight provinces with a combined population of 8.9 million. The majority of the population are Viet people, but other minorities include Bana, Cham, and RaGlai. Economic development is mainly based on industrial production, especially in Da Nang and Khanh Hoa provinces, and in new industrial centers, namely the Chu Lai economic zone and the Dung Quat economic zone (with the Dung Quat refinery). The long coastline offers good potential for the development of the marine economy in the region.

The *Central Highlands* region has a population of 5.3 million that is ethnically dominated by the Bana, Coh, Ede, and Giarai. It shares a border with Cambodia and Laos and covers the poorest areas of the country, with sluggish economic development and weak infrastructure. Its fertile soil is good for industrial crops such as coffee, pepper, and rubber.

The *South East* consists of seven provinces and 14.9 million people, of which Viet people are the majority and Cham and Kh'mer are the main ethnic minorities. This region is the most economically developed and also the most urbanized region in Vietnam, with the economic hub Ho Chi Minh City. Other provinces of the region such as Binh Duong, Dong Nai, and Ba Ria-Vung Tau are industrialized and contribute significantly to economic development in the region.

The *Mekong River Delta* includes 13 provinces and 17.3 million people of which Viet is the main group and Hoa and Khmer the minorities. It is the largest rice-growing area and produces half of Vietnam's total rice production. In addition, the region is home to a large aquacultural industry of catfish and shrimp and a variety of fruits.

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# Chapter 4

## **Spatial Dimensions of Poverty: 1999 and 2009 Poverty Maps**

*New poverty and inequality maps were created using Vietnam's 2009 Population and Housing Census in combination with the 2010 Vietnam Household Living Standards Survey. Poverty rates are highest in rural, inland, upland areas, and especially for ethnic minorities. Regions with high poverty are also characterized by high inequality. Poverty is becoming more spatially concentrated over time.*

## A. Introduction

4.1 Household surveys are an important source of information on poverty and living conditions. But there is also widespread demand for information on poverty at a more disaggregated level, such as districts, communes, and villages, than is typically available through national household surveys. Knowing where poor people live is important information for designing effective poverty reduction policies and programs, including targeted poverty reduction programs and policies to promote infrastructure investment and improve access to public goods and services in poor areas.

4.2 Spatial targeting requires reliable information on poverty outcomes at the local level. The Ministry of Labor, Invalids and Social Affairs' (MOLISA's) system for determining eligibility for support under the National Target Program for Sustainable Poverty Reduction and other social programs uses a bottom-up process of local surveys combined with village-level discussions to produce poverty estimates at the commune level. But analysis suggests that coverage is uneven and there is a need to improve information on poverty outcomes at the local level (Nguyen et al. 2012). Estimation of poverty for small geographical units (for example, districts and communes) is data intensive. While household surveys like the Vietnam Household Living Standard Survey (VHLSS) collect detailed information on household incomes and expenditures, the sample sizes are too small to yield reliable estimates of poverty at the district or commune level. In contrast, Vietnam's decennial Population and Housing Censuses do not suffer from small-sample problems; they cover the whole population. Censuses also collect valuable information on individual and household characteristics that provide insights into living standards. But the Census does not collect the detailed information on income or expenditures needed to directly measure poverty.

4.3 Small area estimation techniques (often referred to as poverty mapping methods) have been developed to estimate poverty at the small-area level. One popular approach, introduced by Elbers, Lanjouw, and Lanjouw (2002, 2003), combines household survey data and census data at the unit record level. The approach exploits a census's coverage of the entire population and the household survey's detailed information on income and expenditure. First, an expenditure (or income) model is estimated using the household survey data. The dependent variable is expenditure (or income), and the explanatory variables are a set of household and community characteristics that are comparable and that are available in both the household survey and the census. Subsequently, the parameter estimates from the expenditure model are applied to the census data in order to predict expenditure for all households in the population. From there it is a straightforward procedure to estimate poverty measures in small areas such as communes and districts.

4.4 The small area estimation method has been applied in a large number of countries to produce maps not only of poverty measures but also of other welfare indicators (see Bedi, Coudouel, and Simler [2007] for review of applications). In Vietnam, a number of poverty maps have been developed in the past using the Elbers, Lanjouw, and Lanjouw small area estimation method. Minot, Baulch, and Epprecht (2003) combined the 1993 Vietnam Living Standard Survey (VLSS) and the 1994 Agricultural Census to estimate poverty at the local level in rural areas of Vietnam. Minot, Baulch, and Epprecht (2003) constructed a poverty map using the 1998 VLSS and a 33 percent sample of the 1999 Population and Housing Census. Nguyen (2009) applied the 2002 VHLSS to the 33 percent sample of the 1999 Population and Housing Census to produce a poverty map for 2002. Nguyen et al. (2010) further updated the rural poverty map for 2006 using the 2006 VHLSS and the 2006 Rural Agriculture and Fishery Census.

4.5 The General Statistics Office (GSO) completed a new census of the population in 2009 and a new round of the Vietnam Household Living Standards Survey in 2010. These datasets were used to construct new poverty and inequality maps for Vietnam. This chapter documents these new estimates of poverty at the province and district level <sup>24</sup> of Vietnam, using the updated 2010 poverty line and

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24 It is not feasible to produce reliable commune-level poverty estimates using the 15 percent sample of the 2009 Population and Housing Census. These will be done at a later date if GSO makes the unit record data available for the full 2009 census.

comprehensive consumption aggregates described in Chapter 2. The estimates are based on the 15-percent sample of the 2009 Population and Housing Census. In addition, poverty is estimated at the provincial and district level for different groups including rural, urban, Kinh/Hoa, and ethnic minority subpopulations. Estimates of provincial- and district-level inequality are also presented, as is a complementary set of “wealth maps,” that is, maps that show which provinces and districts account for the wealthiest 15 percent of the Vietnamese population.

4.6 The chapter then turns to an assessment of spatial changes in poverty based on the 1999 and 2009 poverty maps. Although poverty at the national level has fallen substantially over this period, the rate of progress has not been uniform across all localities. Against a background of substantial aggregate growth and poverty reduction, poverty today has become more concentrated in certain regions of the country and within certain socioeconomic groups. Building on these findings, the mapping methodology is used to assess whether the 62 “poorest districts” identified under Program 30A are indeed among the poorest in Vietnam. Initial findings from policy simulations to assess the gains from spatial targeting in 2010 compared to 1999 are also briefly described. The policy message emerging from both exercises is that spatially targeted poverty reduction policies, including, for example, area-based schemes, will continue to play an important role in Vietnam.

## B. 2009 Poverty Maps

4.7 Small area estimation methods are used to construct per capita expenditure-based poverty rates for regions, provinces, and districts in Vietnam. Table 4.1 presents regional estimates of the poverty rate and per capita expenditure that are computed directly using per capita expenditure data of the 2010 VHLSS and those estimated from the poverty mapping method. The 2012 VHLSS is representative at the regional level, and the regional poverty rate directly estimated from expenditure data can be thus regarded as the benchmark against which to compare the poverty map estimates. Table 4.1 shows that estimates of the poverty rate are quite similar across the two approaches.

**Table 4.1 Per Capita Expenditure and Poverty Indexes**

	Estimates from the 2010 VHLSS				Estimates from Small Area Estimation Method			
	Per Capita Expenditure (thousand VND)	P0	P1	P2	Per Capita Expenditure (thousand VND)	P0	P1	P2
Northern	10,927.1	44.87	0.1558	0.0701	10,826.4	43.85	0.1483	0.0679
Mountain	(250.2)	(1.54)	(0.0069)	(0.0042)	(340.9)	(1.76)	(0.0082)	(0.0046)
Red River	21,546.0	11.95	0.0265	0.0088	20,515.2	10.65	0.0203	0.0060
Delta	(605.6)	(0.85)	(0.0025)	(0.0010)	(592.2)	(1.02)	(0.0025)	(0.0009)
Central	14,222.6	23.73	0.0635	0.0251	14,002.1	22.48	0.0520	0.0180
Coast	(267.3)	(1.33)	(0.0051)	(0.0028)	(268.7)	(1.05)	(0.0031)	(0.0013)
Central	13,069.0	32.74	0.1149	0.0542	12,931.0	33.29	0.1146	0.0536
Highlands	(490.9)	(2.75)	(0.0128)	(0.0077)	(351.8)	(1.25)	(0.0056)	(0.0032)
South	24,297.4	7.02	0.0172	0.0064	23,350.9	7.07	0.0139	0.0043
East	(935.9)	(0.96)	(0.0036)	(0.0018)	(844.9)	(0.84)	(0.0020)	(0.0007)
Mekong	14,858.2	18.71	0.0425	0.0143	14,497.9	17.45	0.0359	0.0112
River Delta	(265.8)	(1.10)	(0.0033)	(0.0015)	(280.7)	(1.08)	(0.0029)	(0.0011)

Source: Estimation based on the 2009 Vietnam Population and Housing Census and the 2010 VHLSS

Note: Standard errors are in parentheses.

P0 is the poverty headcount, P1 is the depth of poverty, P2 is the severity of poverty.

4.8 Table 4.2 presents estimates using poverty-mapping methods of the mean of per-capita expenditure and the estimated poverty rate, and the absolute number of poor people and the contribution to national poverty for all 63 provinces in Vietnam. Lai Chau, Ha Giang, and Dien Bien are the three poorest provinces, with a poverty rate of more than 70 percent. As expected, Hanoi and Ho Chi Minh City are the least-poor cities, followed by Da Nang, Hai Phong, Quang Ninh, Binh Duong, and Ba Ria-Vung Tau. Similar estimates were made for Vietnam's 668 districts and, along with provincial estimates, are presented in the figures and maps that follow (Nguyen et al. 2012).

**Table 4.2 Per-Capita Expenditure and Poverty Rate of Provinces**

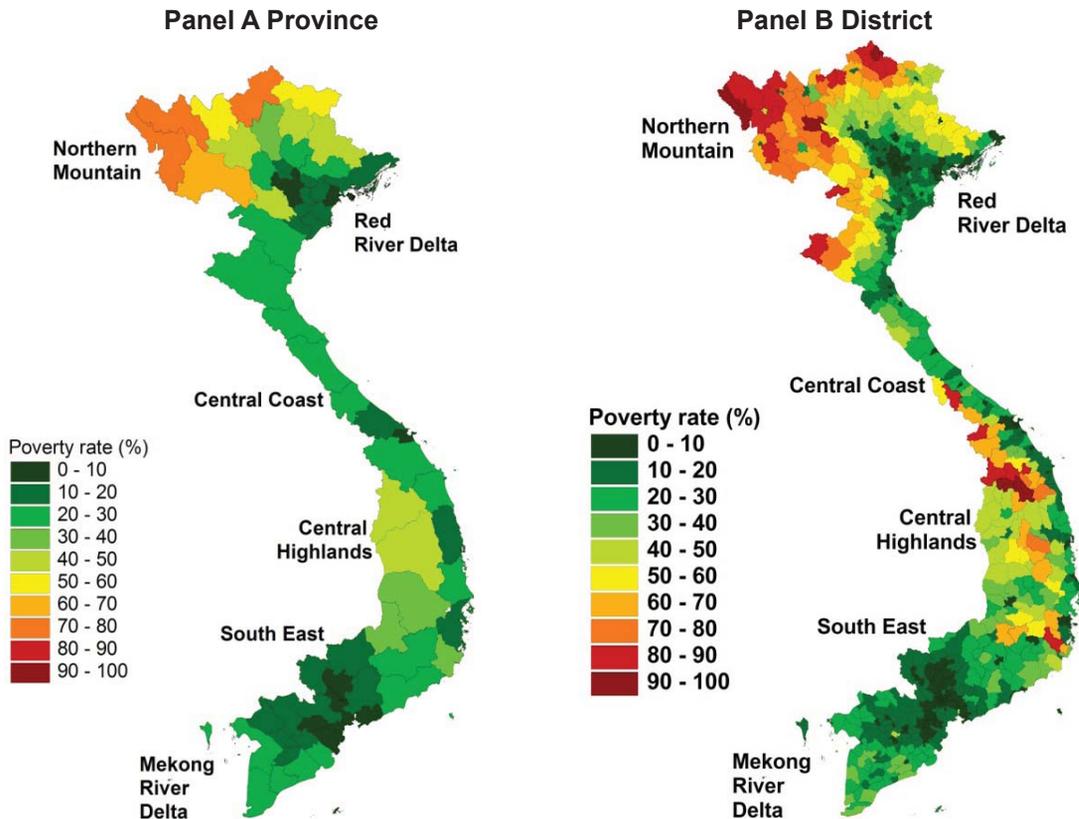
Province	Number of People	Share in Total Pop. (%)	Per Capita Expenditure (thousand VND)		Poverty Rate (%)		Number of Poor People	Share in Total Poverty
			Mean	Std. Err.	Mean	Std. Err.		
<b>Northern Mountain</b>								
Ha Giang	724,352	0.84	7422.7	448.1	71.46	2.99	517,586	3.07
Cao Bang	510,884	0.60	9,325.7	515.1	53.11	3.26	271,348	1.61
Bac Kan	294,660	0.34	10,136.1	792.0	45.97	5.32	135,448	0.80
Tuyen Quang	725,467	0.85	11,238.3	917.9	39.95	5.41	289,798	1.72
Lao Cai	613,074	0.71	9,711.5	817.8	56.77	3.90	348,018	2.06
Dien Bien	491,046	0.57	7,625.9	611.7	71.06	3.65	348,953	2.07
Lai Chau	370,134	0.43	6,809.2	465.3	76.41	2.99	282,805	1.68
Son La	1,080,641	1.26	8,326.0	590.3	63.60	4.02	687,305	4.08
Yen Bai	740,904	0.86	10,621.9	794.5	45.33	4.72	335,860	1.99
Hoa Binh	786,963	0.92	10,439.0	675.5	47.31	4.23	372,330	2.21
Thai Nguyen	1,124,785	1.31	14,170.5	1,117.1	21.99	3.42	247,386	1.47
Lang Son	731,886	0.85	10,292.1	715.1	45.69	4.29	334,364	1.98
Bac Giang	1,555,720	1.81	12,823.4	889.4	23.83	4.33	370,722	2.20
Phu Tho	1,313,926	1.53	13,535.9	806.9	23.62	3.20	310,380	1.84
<b>Red River Delta</b>								
Ha Noi	6,448,837	7.52	29,344.6	1,375.7	4.94	0.89	318,488	1.89
Quang Ninh	1,144,381	1.33	18,538.0	1,243.9	12.12	1.81	138,656	0.82
Vinh Phuc	1,000,838	1.17	15,743.1	869.0	11.99	2.83	119,989	0.71
Bac Ninh	1,024,151	1.19	17,590.4	1,145.4	10.19	2.37	104,327	0.62
Hai Duong	1,703,492	1.99	15,261.3	827.5	14.84	2.73	252,716	1.50
Hai Phong	1,837,302	2.14	20,316.9	1,140.2	7.93	1.62	145,625	0.86
Hung Yên	1,128,702	1.32	16,063.4	812.6	12.78	2.36	144,273	0.86
Thai Bình	1,780,953	2.08	13,578.2	873.7	18.95	3.86	337,435	2.00
Ha Nam	785,057	0.92	14,269.8	1,011.8	16.56	4.07	130,009	0.77
Nam Dinh	1,825,770	2.13	14,866.4	814.6	14.04	2.70	256,321	1.52
Ninh Bình	898,458	1.05	14,955.3	878.3	15.28	3.33	137,314	0.81
<b>Central Coast</b>								
Thanh Hoa	3,400,238	3.96	13,118.2	474.9	26.48	2.09	900,393	5.34
Nghe An	2,913,054	3.40	13,356.4	576.6	26.74	2.57	778,900	4.62
Ha Tinh	1,227,554	1.43	13,222.9	578.5	21.55	2.97	264,499	1.57
Quang Binh	846,924	0.99	13,847.2	798.8	23.20	4.14	196,475	1.17
Quang Tri	597,984	0.70	12,567.1	621.0	29.55	3.15	176,710	1.05

Province	Number of People	Share in Total Pop. (%)	Per Capita Expenditure (thousand VND)		Poverty Rate (%)		Number of Poor People	Share in Total Poverty
			Mean	Std. Err.	Mean	Std. Err.		
Thua Thiên Hue	1,087,578	1.27	14,453.7	955.1	19.43	3.03	211,283	1.25
Da Nang	887,068	1.03	23,087.9	1,311.7	2.39	1.05	21,218	0.13
Quang Nam	1,419,502	1.65	12,703.2	528.7	23.47	2.73	333,146	1.98
Quang Ngãi	1,217,159	1.42	12,955.1	573.2	23.65	2.80	287,827	1.71
Binh Dinh	1,485,943	1.73	14,498.9	834.9	16.68	3.16	247,882	1.47
Phú Yên	861,993	1.00	13,377.2	793.1	22.08	3.47	190,348	1.13
Khanh Hoa	1,156,902	1.35	16,778.1	1,244.5	15.51	2.87	179,462	1.06
Ninh Thuan	564,128	0.66	11,626.1	799.1	34.52	4.36	194,759	1.16
Binh Thuan	1,169,450	1.36	13,428.5	693.8	21.44	3.04	250,692	1.49
<b>Central Highlands</b>								
Kon Tum	430,036	0.50	11,112.5	796.7	47.58	3.37	204,624	1.21
Gia Lai	1,272,791	1.48	11,222.1	439.8	43.34	2.07	551,632	3.27
Dak Lak	1,728,380	2.01	13,445.5	639.8	30.32	2.03	524,104	3.11
Dak Nong	489,441	0.57	11,719.4	500.0	32.50	2.83	159,063	0.94
Lâm Dong	1,186,786	1.38	15,173.1	687.8	21.96	1.97	260,629	1.55
<b>South East</b>								
Binh Phuoc	874,961	1.02	14,370.4	849.9	17.20	3.58	150,477	0.89
Tay Ninh	1,066,402	1.24	15,459.4	737.6	11.78	2.51	125,615	0.75
Binh Duong	1,482,635	1.73	18,378.5	1,168.5	7.82	2.10	115,901	0.69
Dong Nai	2,483,210	2.89	17,293.1	1,129.8	11.73	2.21	291,223	1.73
Ba Ria - Vung Tau	994,836	1.16	18,704.2	1,336.3	9.97	2.22	99,206	0.59
Ho Chí Minh	7,123,340	8.30	29,431.0	1,342.5	2.94	0.51	209,427	1.24
<b>Mekong River Delta</b>								
Long An	1,436,913	1.67	16,334.8	703.5	10.97	1.64	157,596	0.93
Tien Giang	1,670,215	1.95	16,578.6	875.9	9.53	2.14	159,215	0.94
Ben Tre	1,254,588	1.46	16,022.7	745.8	10.00	2.00	125,506	0.74
Tra Vinh	1,000,932	1.17	13,507.1	688.8	22.28	3.09	222,988	1.32
Vinh Long	1,028,365	1.20	16,038.5	887.7	11.76	2.26	120,947	0.72
Dong Thap	1,665,420	1.94	13,820.8	605.6	15.58	2.42	259,532	1.54
An Giang	2,144,772	2.50	13,739.4	595.5	18.22	2.50	390,808	2.32
Kiên Giang	1,683,149	1.96	13,057.1	580.7	24.02	2.62	404,319	2.40
Can Tho	1,187,088	1.38	17,911.6	1,029.2	11.70	1.97	138,868	0.82
Hau Giang	756,625	0.88	13,369.3	690.7	19.68	3.41	148,915	0.88
Soc Trang	1,289,441	1.50	12,561.6	604.5	27.28	3.10	351,709	2.09
Bac Liêu	856,249	1.00	12,533.0	670.7	23.30	3.74	199,528	1.18
Ca Mau	1,205,107	1.40	12,456.9	682.5	26.36	3.48	317,609	1.88

Sources: Estimation based on the 2009 Population and Housing Census and the 2010 VHLSS.

4.9 Map 4.1 shows the spatial distribution of poverty by provinces and districts in 2009. Poverty rates are highest in the mountainous Northern areas and lowest in the Mekong and Red River Deltas. Disaggregating down to the district level reveals a greater degree of heterogeneity in terms of both pockets of extreme poverty and pockets with particularly low levels of poverty. As discussed later in the chapters, such heterogeneity across sub-national localities translates into gains from spatial targeting of resources for poverty reduction.

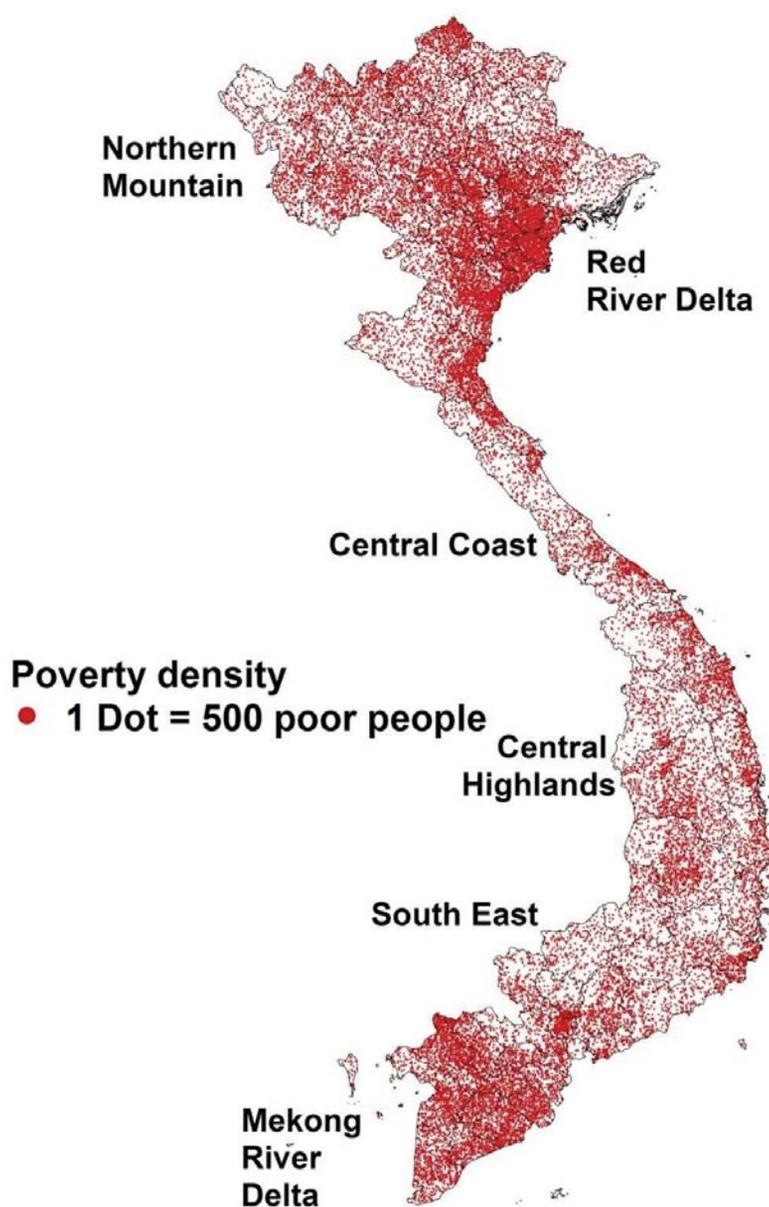
**Map 4.1 Predicted Poverty Rates of Provinces and Districts, 2009**



Source: Estimation based on the 2009 Population and Housing Census and the 2010 VHLSS.

4.10 Map 4.2 graphs the density of the poor across the country. Because of their large populations, the Mekong and Red River Delta regions still account for a significant number of poor people living in Vietnam. However, as shown below (map 4.10), the picture in 2009 is much less accentuated than at the time of the preceding census, and as such indicates a clear attenuation of the pattern described in earlier studies of poverty in Vietnam (see Minot, Baulch, and Epprecht 2003) where the distribution of the number of poor people was inversely correlated with the spatial distribution of poverty rates. In the late 1990s, the incidence of poverty was highest in more sparsely populated localities and these thus accounted for only a modest fraction of the poor. Today, although poverty rates remain spatially concentrated, the distribution of poor people is more evenly spread across the country. Consequently Vietnam's poorest communities now account for a larger share of the poor population.

Map 4.2 Density of Poverty ( Number of Poor People), 2009



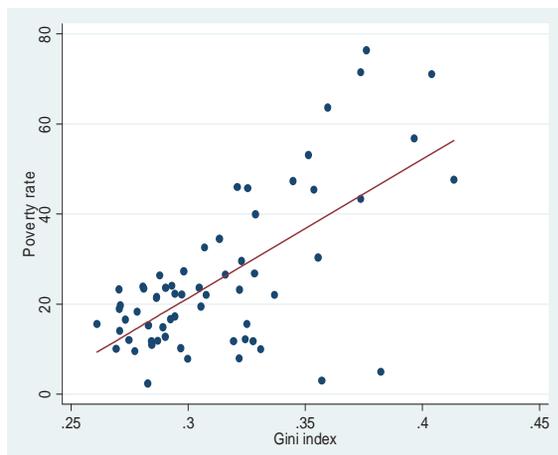
Source: Estimation based on the 2009 Population and Housing Census and the 2010 VHLSS.

### Inequality is higher in poorer regions

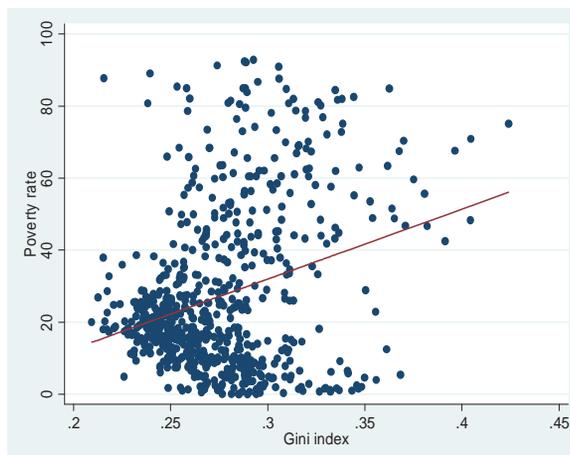
4.11 In Vietnam, there is a positive relationship between poverty and inequality (measured by the Gini index). A more equal distribution in well-being is associated with a lower poverty rate (figure 4.1) at the district and province level, while regions with high poverty rates tend to be more unequal. This result is in large part driven by persistent gaps in well-being between ethnic minorities and Kinh majorities (see below, also Chapter 5). However, there remains a great deal of heterogeneity in inequality outcomes, particularly when results are disaggregated to the district level.

**Figure 4.1 Relationship between the Poverty Rate and Gini Index**

**Panel A: Provinces**



**Panel B: Districts**



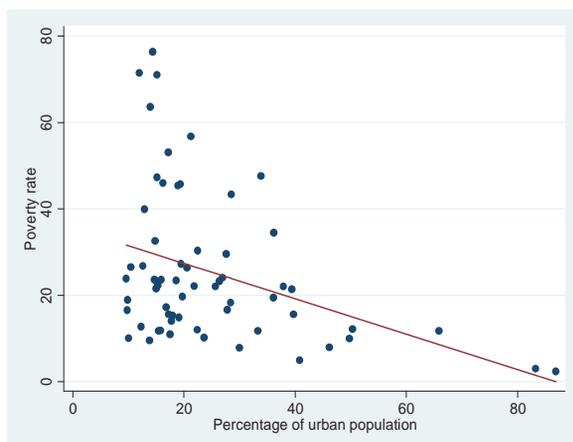
Source: Estimation based on the 2009 Population and Housing Census and the 2010 VHLSS.

### Relationship between Poverty and other Characteristics

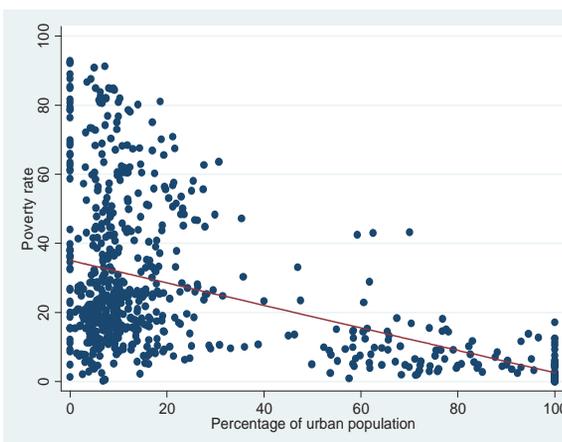
4.12 Although Vietnam remains a rural country, urbanization has been accelerating in recent years. About 30 percent of people now reside in urban areas (GSO 2011). Overall, urban areas tend to have lower poverty, and poverty tends to decrease as the urban population share increases (Ravallion, Chen, and Sangraula 2007). Figure 4.2 shows that poverty is negatively correlated with the urban population share at the provincial and district level but, again, with considerable geographic variability.

**Figure 4.2 Poverty Rate and Proportion of Urban Population**

**Panel A Provinces**



**Panel B Districts**



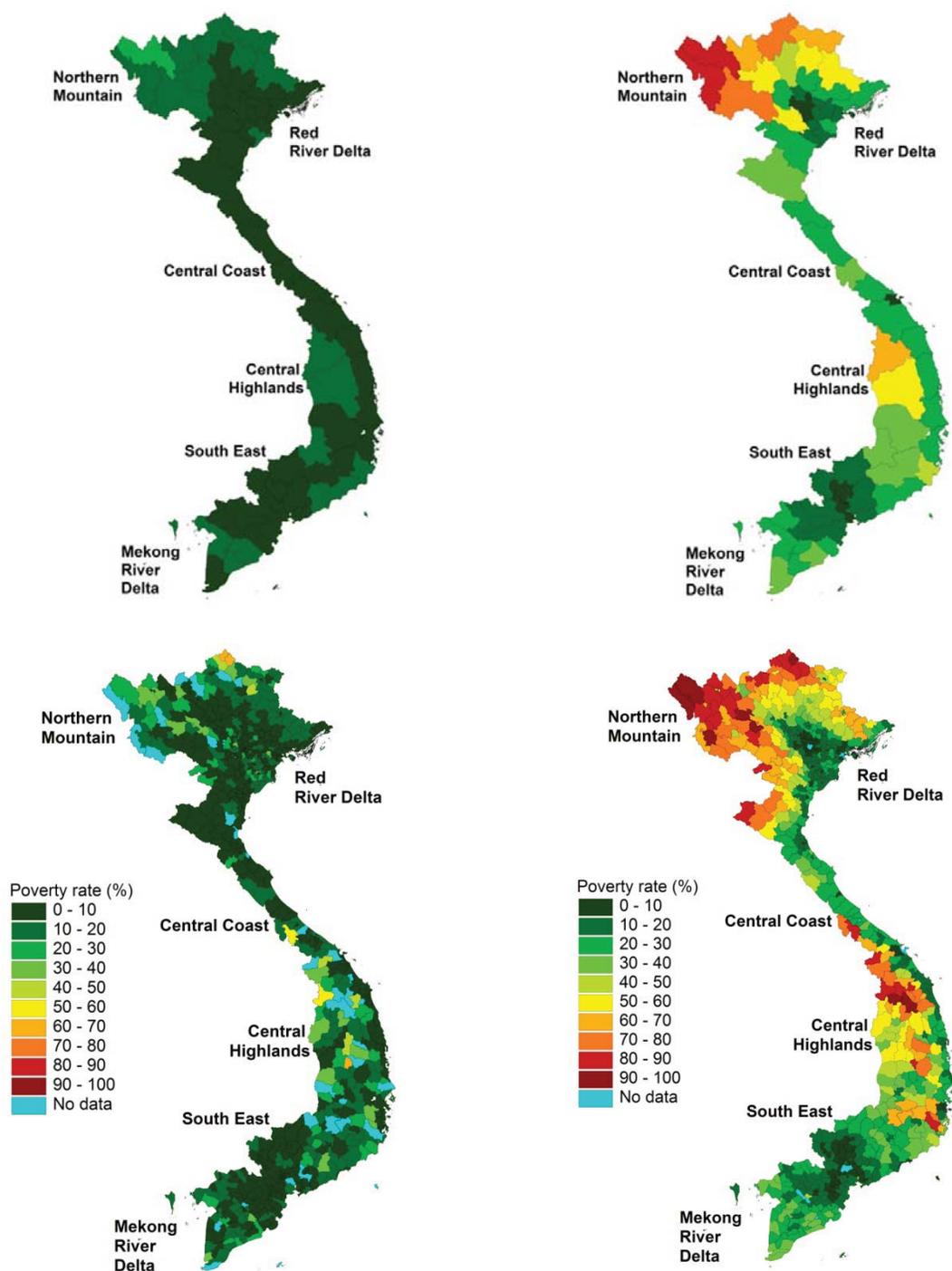
Source: Estimation based on the 2009 Population and Housing Census and the 2010 VHLSS.

4.13 Despite the ongoing urbanization process, poverty in Vietnam is still largely a rural phenomenon; consistent with the updated poverty profile presented in Chapter 3, results using the poverty mapping approaches confirms that 95 percent of the poor live in rural areas. Map 4.3 compares poverty rates in urban and rural areas both at province and district levels. Urban poverty is found to be uniformly lower, and there are substantial differences in poverty rates between urban and rural areas within a given province or district. As discussed in Chapter 3, 70 percent of the urban poor live in smaller cities and towns, rather than Vietnam's large (special, Class 1 and 2) cities.

Map 4.3 Urban and Rural Poverty Rates

Panel A Urban Provinces and Districts

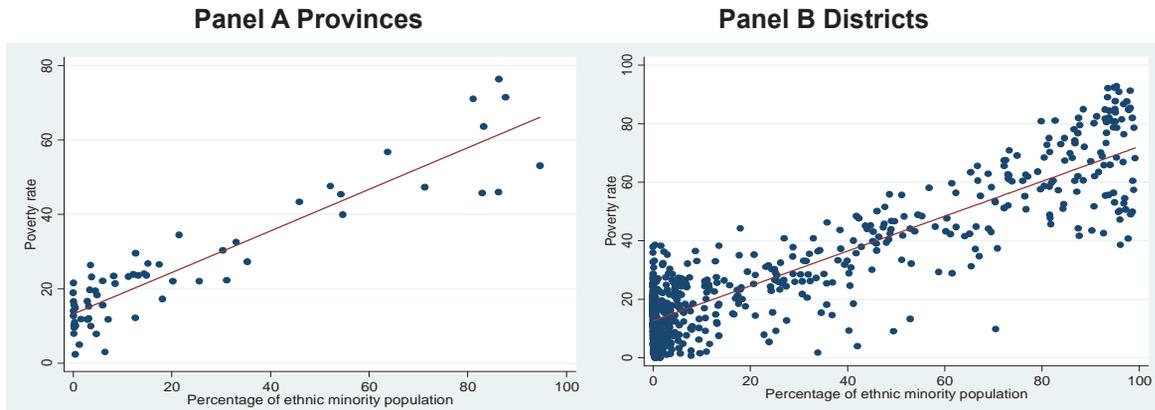
Panel B Rural Provinces and Districts



4.14 Analysis based on mapping methods also confirms that poverty has become increasingly concentrated among ethnic minority populations, and there is a strong correlation between the share of ethnic minorities in the population and the poverty rate, at both the province and district levels (figure 4.3).<sup>25</sup>

25 The mapping methodology may underestimate ethnic minority poverty, because it assumes that minorities receive the same returns to their endowments as the Kinh majority. Studies suggest that minorities not only have lower levels of assets, but also receive lower returns on their assets (Baulch and Dat 2012). Estimates presented here and in Chapter 3 provide lower bound estimates of geographically disaggregated poverty levels.

**Figure 4.3 Poverty Rate and Proportion of Ethnic Minorities**



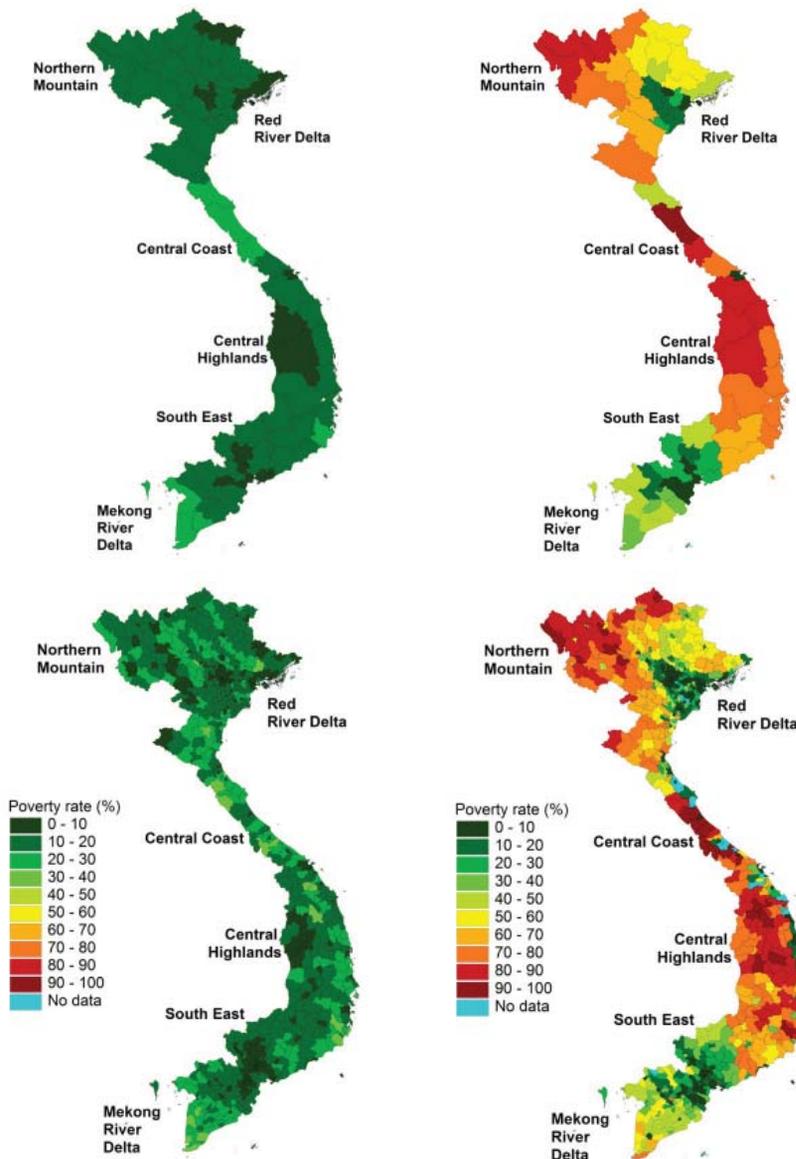
Source: Estimation based on the 2009 Population and Housing Census and the 2010 VHLSS.

4.15 Consistent with Chapter 3, Vietnam’s poor are increasingly concentrated in the Northern Mountains and Central Highlands, where there are high proportions of minorities in local populations.

**Map 4.4 The Poverty Rate of Kinh/Hoa and Ethnic Minority People**

**Panel A Kinh/Hoa People**

**Panel B Ethnic Minority People**



## C. Inequality and Wealth Maps

4.16 We employ two measures of inequality, the Gini index and the ratio of the 90th-to-10th expenditure percentile (a measure of “absolute” inequality). Provincial results are presented in table 4.3. Provincial- and district-level estimates are presented in the figures and maps that follow, and elsewhere (Nguyen et al. 2012).

4.17 Consistent with table 4.3, maps 4.5 and 4.6 illustrate that inequality of expenditures tends to be higher in provinces and districts with low average expenditures. Districts with high poverty rates in the Northern Mountains (these also have a high percentage of minorities) have higher expenditure inequality than other regions. This finding is noteworthy in light of the common (often implicit) view in Vietnam that everyone in poor communities is similarly poor. But the finding also resonates with other empirical studies of inequality (see Elbers et al. 2004). While there may be poor localities where everyone is similarly poor, more in-depth analysis at the commune level (see targeting simulations described in Annex 4.1) suggests there is still substantial inequality at low levels of geographic disaggregation. Communes in Vietnam typically consist of four to six villages; empirical work suggests that villages tend to be more ethnically and economically homogeneous than communes.

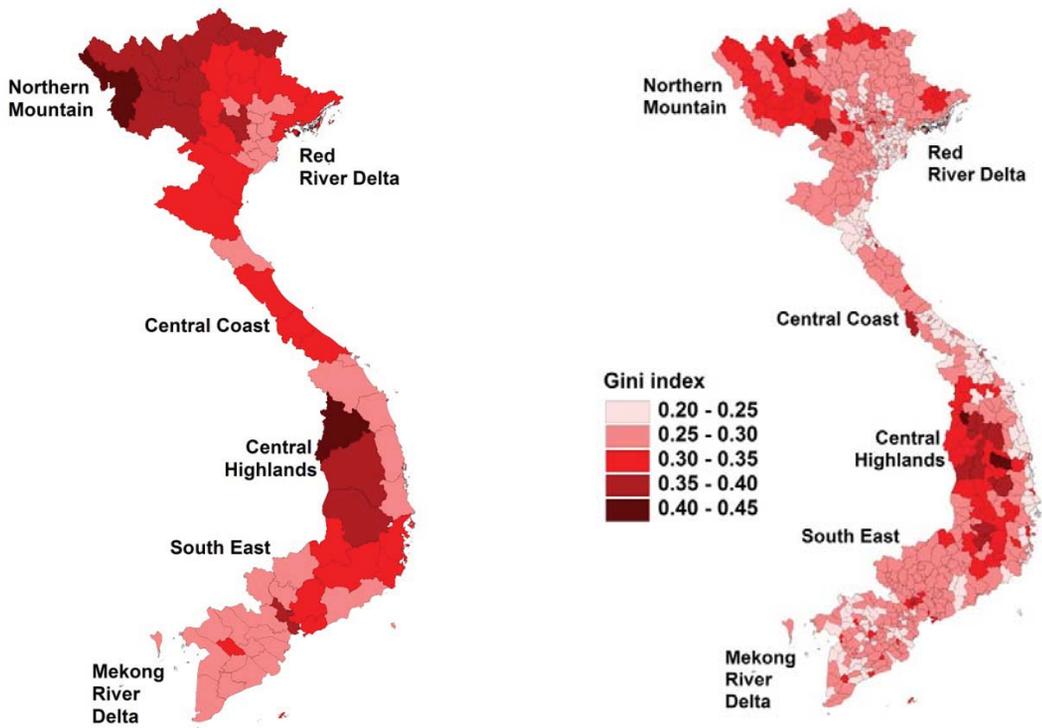
**Table 4.3 Inequality and Wealth Measures for Provinces**

Provinces	Gini Index		Ratio of 90th to 10th Expenditure Percentile		Percentage of People in the Richest 20%	
	Mean	Std. Err.	Mean	Std. Err.	Mean	Std. Err.
<b>Northern Mountain</b>						
Ha Giang	0.374	0.018	4.93	0.35	3.55	0.89
Cao Bang	0.351	0.016	5.10	0.40	4.73	1.14
Bac Kan	0.321	0.018	4.21	0.32	5.31	1.62
Tuyen Quang	0.329	0.021	4.38	0.37	7.54	2.13
Lao Cai	0.397	0.019	6.12	0.53	7.38	1.99
Dien Bien	0.404	0.023	5.82	0.56	4.51	1.29
Lai Chau	0.376	0.017	4.82	0.29	2.99	0.80
Son La	0.360	0.013	4.82	0.27	4.20	1.02
Yen Bai	0.354	0.019	5.20	0.46	7.24	1.91
Hoa Binh	0.345	0.018	4.70	0.35	6.83	1.57
Thai Nguyen	0.308	0.021	4.11	0.42	13.33	3.44
Lang Son	0.325	0.018	4.31	0.32	5.77	1.69
Bac Giang	0.281	0.012	3.60	0.22	8.55	2.29
Phu Tho	0.305	0.013	4.01	0.26	11.30	2.21
<b>Red River Delta</b>						
Ha Noi	0.382	0.013	6.02	0.40	49.03	2.16
Quang Ninh	0.324	0.015	4.50	0.34	25.76	3.65
Vinh Phuc	0.275	0.012	3.47	0.19	15.81	2.73
Bac Ninh	0.297	0.014	3.85	0.26	22.08	3.55
Hai Duong	0.289	0.013	3.63	0.18	14.49	2.33
Hai Phong	0.322	0.014	4.32	0.28	30.29	3.26
Hung Yên	0.290	0.012	3.68	0.21	16.96	2.49
Thai Binh	0.271	0.014	3.36	0.19	9.40	2.33
Ha Nam	0.273	0.015	3.41	0.23	11.33	2.95
Nam Dinh	0.271	0.014	3.40	0.19	12.97	2.50
Ninh Binh	0.283	0.016	3.57	0.24	13.63	2.55
<b>Central Coast</b>						
Thanh Hoa	0.316	0.011	3.95	0.15	10.11	1.15
Nghe An	0.328	0.016	4.15	0.21	10.88	1.33

Provinces	Gini Index		Ratio of 90th to 10th Expenditure Percentile		Percentage of People in the Richest 20%	
	Mean	Std. Err.	Mean	Std. Err.	Mean	Std. Err.
Quang Binh	0.322	0.017	3.99	0.26	11.75	1.81
Quang Tri	0.323	0.012	4.42	0.25	9.45	1.51
Thua Thiên Hue	0.305	0.016	3.90	0.29	13.22	2.80
Da Nang	0.283	0.011	3.63	0.21	40.11	4.16
Quang Nam	0.281	0.009	3.55	0.17	8.04	1.42
Quang Ngãi	0.290	0.012	3.76	0.20	8.72	1.58
Binh Dinh	0.293	0.015	3.57	0.23	12.42	2.28
Phú Yên	0.297	0.015	3.60	0.22	9.69	2.02
Khanh Hoa	0.325	0.017	4.44	0.35	20.18	3.50
Ninh Thuan	0.313	0.015	4.19	0.30	7.28	1.92
Binh Thuan	0.287	0.012	3.64	0.19	10.02	1.91
Central Highlands						
Kon Tum	0.414	0.011	7.60	0.47	9.97	2.04
Gia Lai	0.374	0.008	6.18	0.24	8.87	1.16
Dak Lak	0.356	0.011	5.34	0.25	12.50	1.70
Dak Nong	0.307	0.007	4.44	0.15	7.03	1.19
Lâm Dong	0.337	0.010	4.98	0.23	16.80	2.00
South East						
Binh Phuoc	0.294	0.009	3.53	0.16	11.53	1.91
Tay Ninh	0.287	0.008	3.35	0.14	13.49	1.79
Binh Duong	0.300	0.008	3.62	0.15	22.47	3.65
Dong Nai	0.319	0.014	3.93	0.27	19.47	3.27
Ba Ria - Vung Tau	0.331	0.015	4.14	0.28	23.46	3.70
Ho Chí Minh	0.357	0.009	4.73	0.18	51.17	2.87
Mekong River Delta						
Long An	0.285	0.009	3.57	0.13	17.55	2.15
Tien Giang	0.277	0.010	3.46	0.14	18.18	2.72
Ben Tre	0.269	0.009	3.36	0.13	16.29	2.33
Tra Vinh	0.294	0.009	3.76	0.15	10.49	1.80
Vinh Long	0.284	0.011	3.58	0.17	16.81	2.66
Dong Thap	0.261	0.007	3.18	0.10	9.59	1.60
An Giang	0.278	0.009	3.39	0.13	9.98	1.49
Kiên Giang	0.293	0.010	3.72	0.14	9.43	1.48
Can Tho	0.328	0.017	4.29	0.33	22.59	2.76
Hau Giang	0.271	0.008	3.39	0.12	9.22	1.70
Soc Trang	0.298	0.011	3.79	0.16	8.44	1.46
Bac Liêu	0.271	0.010	3.32	0.13	7.25	1.56
Ca Mau	0.288	0.012	3.58	0.17	7.76	1.63

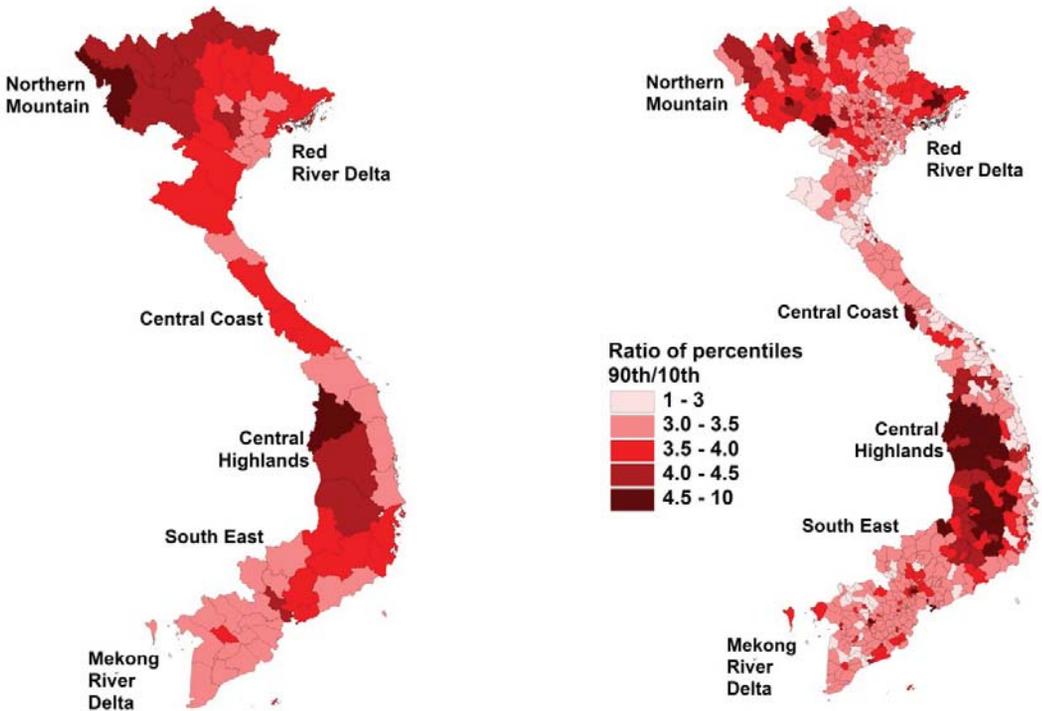
Source: Estimation based on the 2009 Population and Housing Census and the 2010 VHLSS.

**Map 4.5 Expenditure Gini Indices**  
**Panel A Provinces** **Panel B Districts**



Source: Estimation based on the 2009 Population and Housing Census and the 2010 VHLSS.

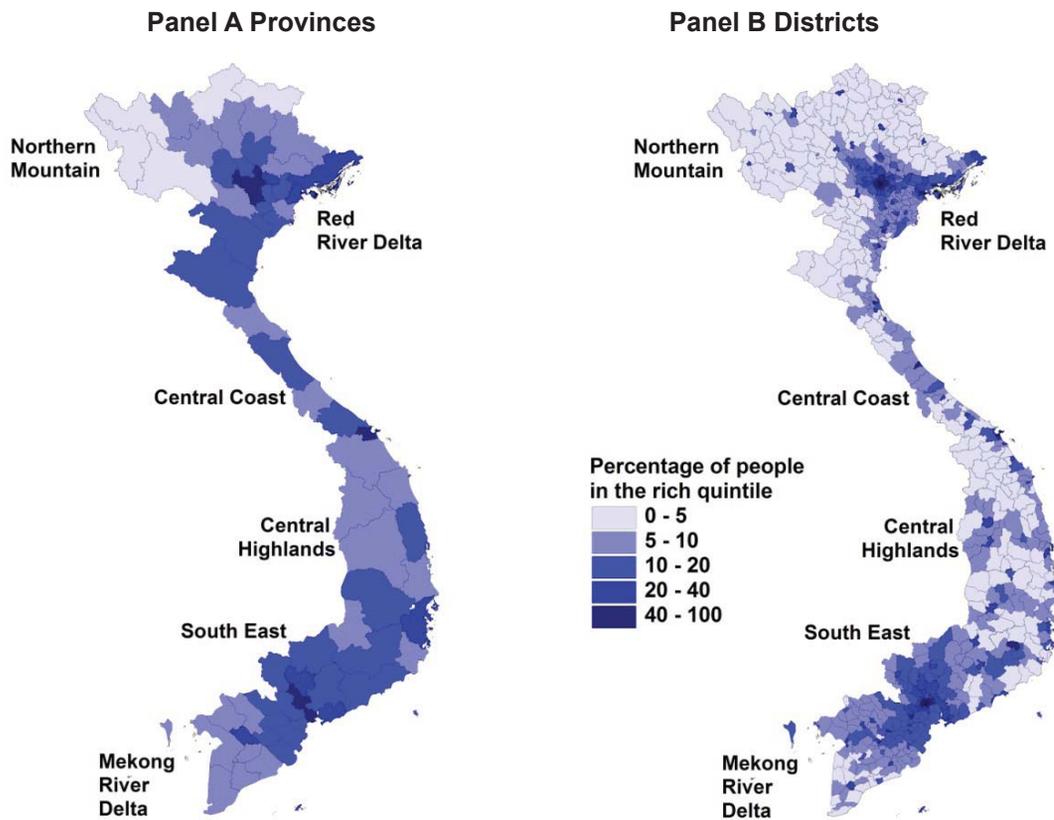
**Map 4.6 Ratio of the 90th Expenditure Percentile to the 10th Expenditure Percentile**  
**Panel A Provinces** **Panel B Districts**



Source: Estimation based on the 2009 Population and Housing Census and the 2010 VHLSS.

4.18 Map 4.7 shows the locations of the wealthiest 20 percent of households in Vietnam—the so-called middle class and rich. As expected, individuals in the top quintile of the per-capita expenditure distribution are spatially concentrated in the Delta regions, especially in Hanoi and Ho Chi Minh City and in the immediate surrounding areas.

**Map 4.7 Proportion of People in the Richest Expenditure Quintile (%)**



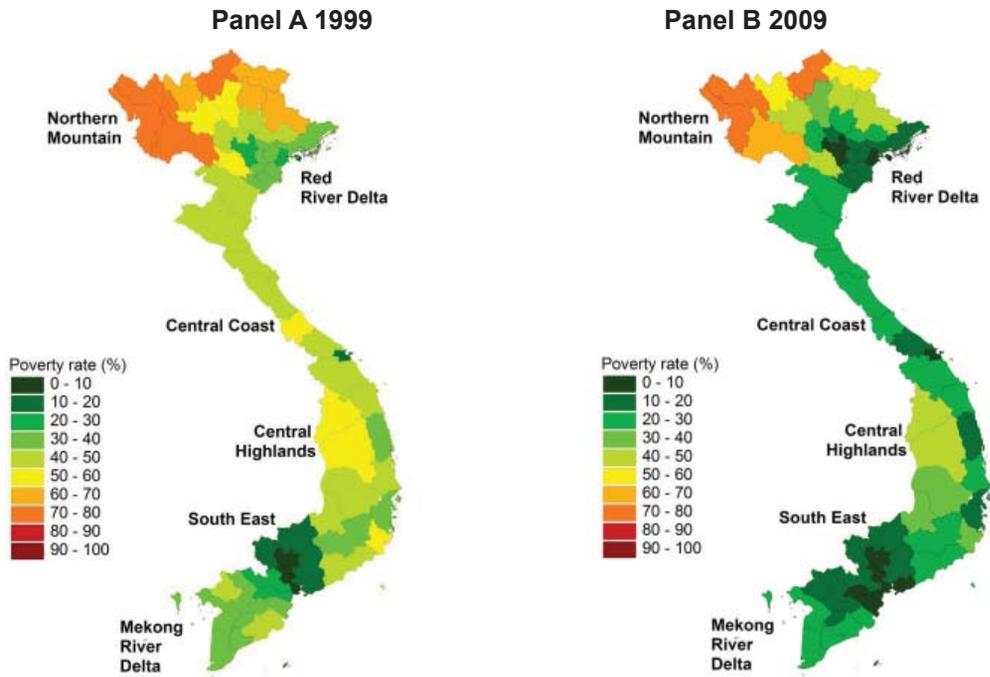
Source: Estimation based on the 2009 Population and Housing Census and the 2010 VHLSS.

## D. The Evolution of Spatial Poverty, 1999 to 2009

4.19 Chapter 1 documents Vietnam’s rapid reduction in poverty since the early 1990s based on a range of poverty lines applied to successive rounds of the VHLSS. However, the VHLSS is only representative at higher levels of spatial aggregation, that is, by region and urban and rural sector. The 2009 poverty maps can be compared with 1999 poverty maps to measure progress at the provincial and districts levels, also to look at changes in the spatial distribution of poverty over time. This section describes spatial patterns of poverty, albeit leaving for future work indepth analysis of the causal mechanisms that underpin these patterns.

4.20 Comparisons of maps 4.8 and 4.9 show that poverty fell most rapidly between 1999 and 2009 in the provinces and districts in the two Deltas. Provinces and districts in the Northern Mountains and Central Highlands experienced substantially lower rates of poverty reduction. District-level maps highlight the variation within provinces, such as in the Central Highlands.

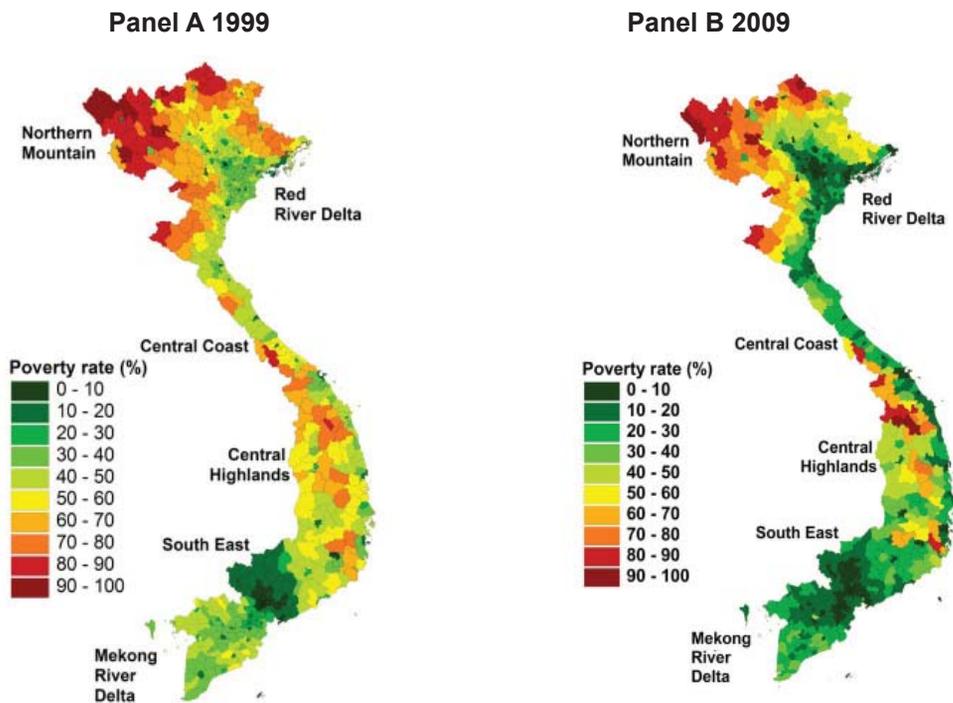
### Map 4.8 Provincial Poverty Rates



Source: Estimation based on the 2009 Population and Housing Census and the 2010 VHLSS.

Note: the 1999 poverty rates are obtained from Minot, Baulch, and Epprecht (2003).

### Map 4.9 District Poverty Rates

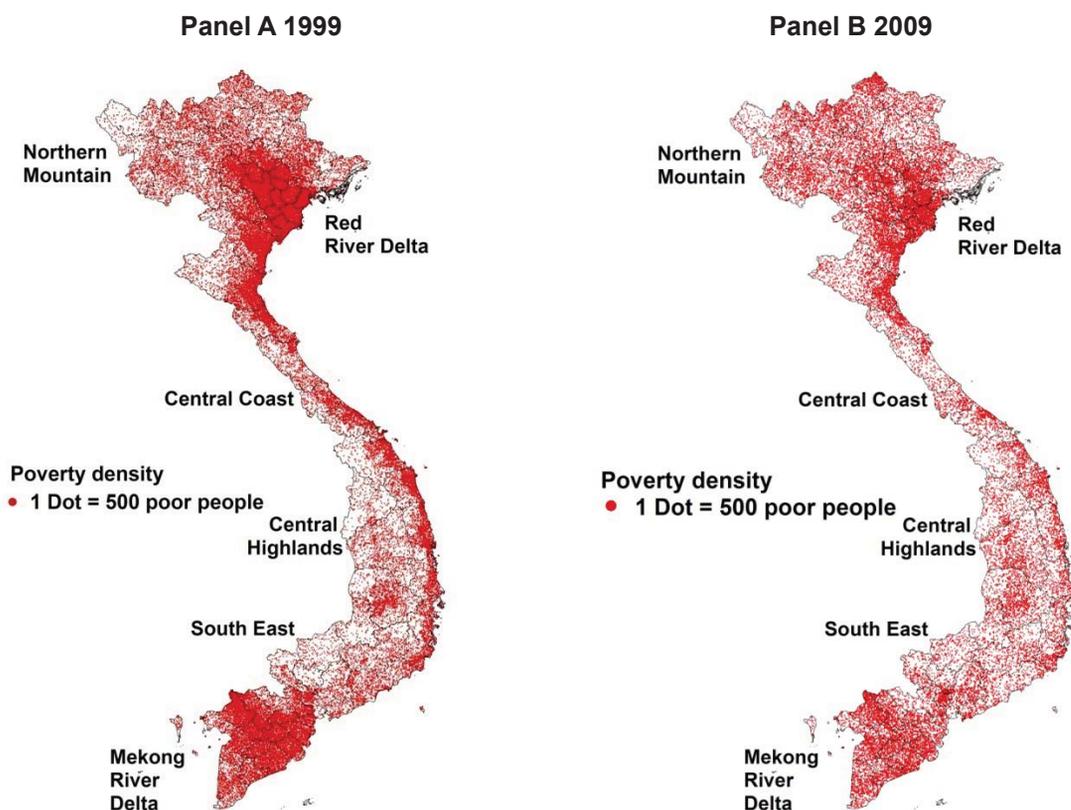


Source: Estimation based on the 2009 Population and Housing Census and the 2010 VHLSS.

Note: the 1999 poverty rates are obtained from Minot, Baulch, and Epprecht (2003).

4.21 Areas with high incidence of poverty are not necessarily the areas with the highest numbers of poor people. For example, many provinces in the Northern Mountains have a high incidence of poverty but have low population densities, and thus account for a small share of the total poor in Vietnam. Map 4.10 shows the density of the poor across the country in 1999 and 2009. In 1999, the poor were highly concentrated in the Red River Delta and Mekong River Delta; these areas had moderate poverty rates but high population densities. By 2009, however, poverty had become less spatially concentrated. The number of poor decreased remarkably in the two Delta regions, but much less in the Northern Mountains and Central Highlands.

**Map 4.10 Poverty Density (Number of Poor)**

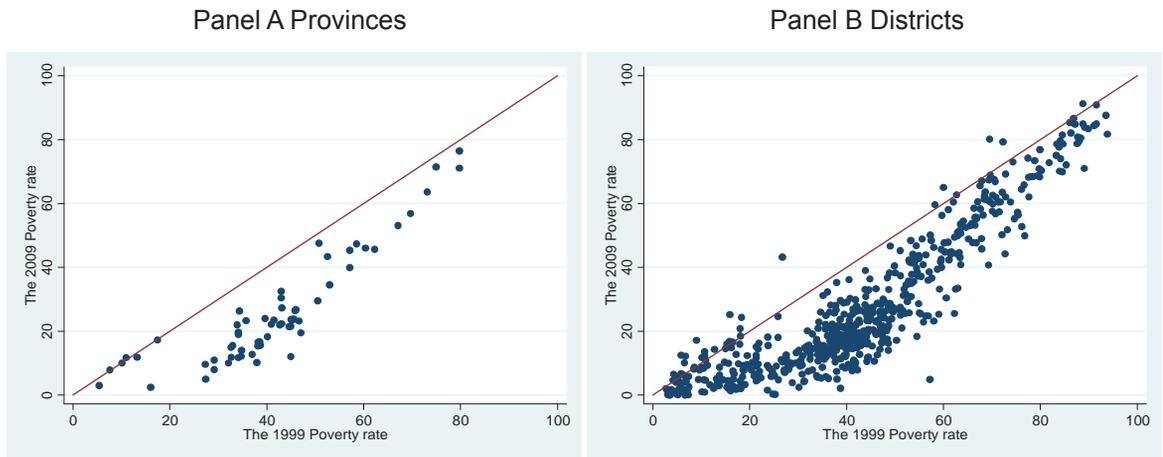


*Source:* Estimation based on the 2009 Population and Housing Census and the 2010 VHLSS  
*Note:* the 1999 poverty rates are obtained from Minot, Baulch, and Epprecht (2003).

4.22 Nearly all provinces and districts experienced a decline in poverty between 1999 and 2009 (figure 4.4). But the rate of progress was slower in areas that had very high or very low rates of poverty in 1999, and much faster in areas that started the period in the middle ranges (that is, with a headcount of 25 to 55 percent) (figure 4.5).

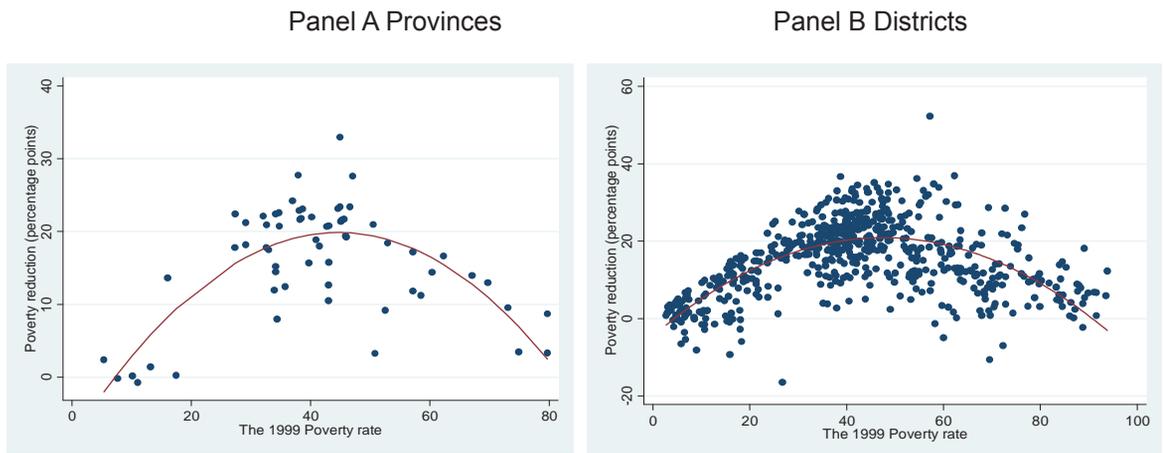
4.23 Provinces with lower levels of inequality in 1999 also in general achieved a larger reduction in poverty. This largely reflects the growing gap between Kinh and ethnic minority households; high inequality areas typically had a high proportion of ethnic minorities (figure 4.6).

**Figure 4.4 Poverty Rates, 1999 and 2009**



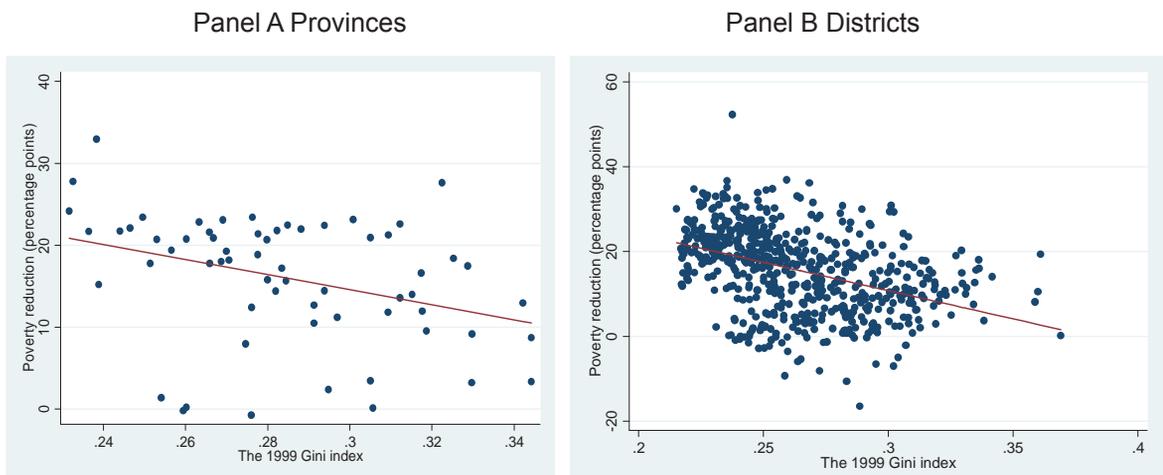
Source: Estimation based on the 2009 Population and Housing Census and the 2010 VHLSS.  
 Note: the 1999 poverty rates are obtained from Minot, Baulch, and Epprecht (2003).

**Figure 4.5 Poverty Reduction, 1999-2009, and Poverty Rate, 1999**



Source: Estimation based on the 2009 Population and Housing Census and the 2010 VHLSS.  
 Note: the 1999 poverty rates are obtained from Minot, Baulch, and Epprecht (2003).

**Figure 4.6 Change in Poverty, 1999-2009, Compared to the Initial Gini Index, 1999**



Source: Estimation based on the 2009 Population and Housing Census and the 2010 VHLSS.  
 Note: the 1999 poverty rates are obtained from Minot, Baulch, and Epprecht (2003).

## Contribution of the Rural Nonfarm Sector to Poverty Reduction

4.24 A number of factors are responsible for differential rates of progress across provinces and districts in Vietnam, and new work is underway to better understand some of the key drivers of progress over the last decade. Income and employment diversification has been a strong force for growth and poverty reduction. Much attention has been paid to diversification linked to rural-to-urban migration and the role of remittances. In a number of other countries, the expansion of the rural nonfarm sector has been shown to play a beneficial role in rural development and improving the lives of the poor. The rural nonfarm sector can help absorb excess agricultural labor, provide insurance against agricultural shocks, reduce rural-to-urban migration and, more generally, promote a more equitable distribution of income (see, for example, Ferreira and Lanjouw 2001; Lanjouw and Lanjouw 2000; Oseni and Winters 2009).

4.25 Between 1999 and 2009, a major shift occurred in rural occupations in Vietnam. While in 1999, more than 81 percent of the working population worked in agriculture, by 2009, this has dropped to about 71 percent. The growth of the rural nonfarm sector has been primarily due to expansion in the number of low-skilled blue collar occupations in the construction, manufacturing, trade, and food preparation sectors. More than half of the increase in fast-growing blue collar nonfarm industries in rural Vietnam is the result of an expanding construction sector (table 4.4).

**Table 4. 4 Rural Employment and Percent of the Working Population in Sector**

	Description	1999 (%)	2009 (%)
Farm	All agriculture and forestry and fishing	81.4	71.2
Nonfarm	Self-employed nonfarm, nonfarm wage labor, rural-urban commuters	18.6	28.8
White-collar nonfarm	Finance, consulting, science, government, television, healthcare, education, Communist party	5.9	5.8
Blue-collar nonfarm	Mining, processing, construction, reparation, trading, food preparation, transportation, cleaning	12.6	23.0
Construction	All construction, site preparation, building activities	1.6	7.5
Other blue-collar nonfarm	All other blue-collar nonfarm jobs	11.0	15.5

Source: 1999 and 2009 Vietnam Population and Housing Censuses.

4.26 Results from the district-level poverty maps, augmented with data from the 1999 and 2009 Population and Housing Censuses, were used to explore the determinates of rural nonfarm diversification and its contribution to poverty reduction. Proximity to an urban center was found to stimulate rural nonfarm employment, in particular, proximity to large cities (Lanjouw and Marra, 2013). In terms of economic significance, the nonfarm sector of rural districts that are on average 10 kilometers further removed from the nearest city grew 1.63 percentage points more slowly between 1999 and 2009. Although the absolute magnitude may seem small, providing jobs for around 2 percent of the working population for every 10 kilometers of urban proximity is substantial. In addition, analysis suggests that growth in the rural nonfarm sector did indeed contribute to poverty reduction between 1999 and 2009; the poverty headcount was reduced by .0186 (1.86 percent) for a 10-percentage-point increase in the growth in the nonfarm sector. A similar picture emerges when we consider reductions in the severity of poverty (P1), and even the poorest of the poor, captured in reductions in the squared poverty gap (P2), were found to benefit from an expanding nonfarm sector. These findings stand in contrast to Hoang et al. (2012), whose findings suggest that the very poor do not benefit from expansion in the rural nonfarm sector because they lack the education and skills to access nonfarm jobs. It is clearly important to look beyond the household level to understand the potential indirect labor market effects of an expanding nonfarm sector.

## E. In what other Ways can Mapping Methods Inform Policy Design and Evaluation?

4.27 This chapter has documented changing patterns in the spatial distribution of poverty between 1999 and 2009. But what do these imply for the design of policy? A series of simulations were carried out to assess how much the spatial disaggregation provided by poverty maps can help to improve area-based targeting schemes in Vietnam (details provided in Annex 4.1). The simulations are based on a hypothetical transfer scheme that aims to minimize poverty at the national level (focusing on the squared poverty gap, or severity of poverty) by using spatial targeting at different levels of geographic disaggregation, that is, province, district, and commune. The initial results clearly show that in both 1999 and 2009 there were potentially large gains in targeting performance by disaggregating to the local level. An important corollary of these findings is that the benefits from spatial targeting become increasingly evident as more and more disaggregated data on poverty are considered. The simulations show that a given impact on poverty can be achieved at considerably less expense with detailed spatial targeting than with a uniform transfer.

4.28 A second key finding is that the benefits from spatial targeting, at any level of geographic disaggregation, are more clearly evident in 2009 than 1999. This finding follows directly from the evidence presented in the previous section on the changing spatial distribution of poverty in Vietnam over time. As Vietnam has prospered, moderately poor households living in relatively well-off areas in 1999 (for example, Red River Delta) were able to cross the poverty line, so that by 2009 such relatively well-off areas no longer contributed as much to overall poverty. Poverty has become more concentrated in poor districts. For policy makers, this is an important finding, because it indicates that there may be a stronger rationale for using area-based targeting to reach the poor today than was previously the case.

4.29 But these findings should be viewed as illustrative only. They do not take account of important practical and political considerations such as how the hypothetical transfers would be financed, the costs of administering such a scheme, possible behavioral responses of households, and the possibility of local capture linked to power and influence. The anticipated albeit hypothetical gains from targeting must be juxtaposed against the potential costs and political-economy considerations, and should be scrutinized against other possible policy objectives. In practice, a combination of geographic targeting between villages and means-tested targeting on poor households within villages is likely to be the best way forward for Vietnam.

4.30 We close this chapter with a brief assessment of the targeting performance of Program 30A, one of MOLISA's newer area-based targeted poverty reduction programs. A welfare ranking of districts is drawn up, based on criteria developed by MOLISA (incorporating information on income, as opposed to expenditures, and other indicators of well-being), and the poorest 62 districts on the list are singled out for specific policy interventions (box 4.1). Mapping methods were used to see whether the 62 poorest districts identified by MOLISA's criteria are also the poorest as measured by the per-capita expenditure criteria underpinning the Vietnam poverty map for 2009. Figure 4.7 illustrates the close correlation between the two approaches; the districts targeted by MOLISA are also among the poorest identified by the independent mapping methodology. Spatial targeting in Vietnam is not only warranted on empirical and conceptual grounds, but appears administratively and logistically feasible, as evidenced by one well-established program.

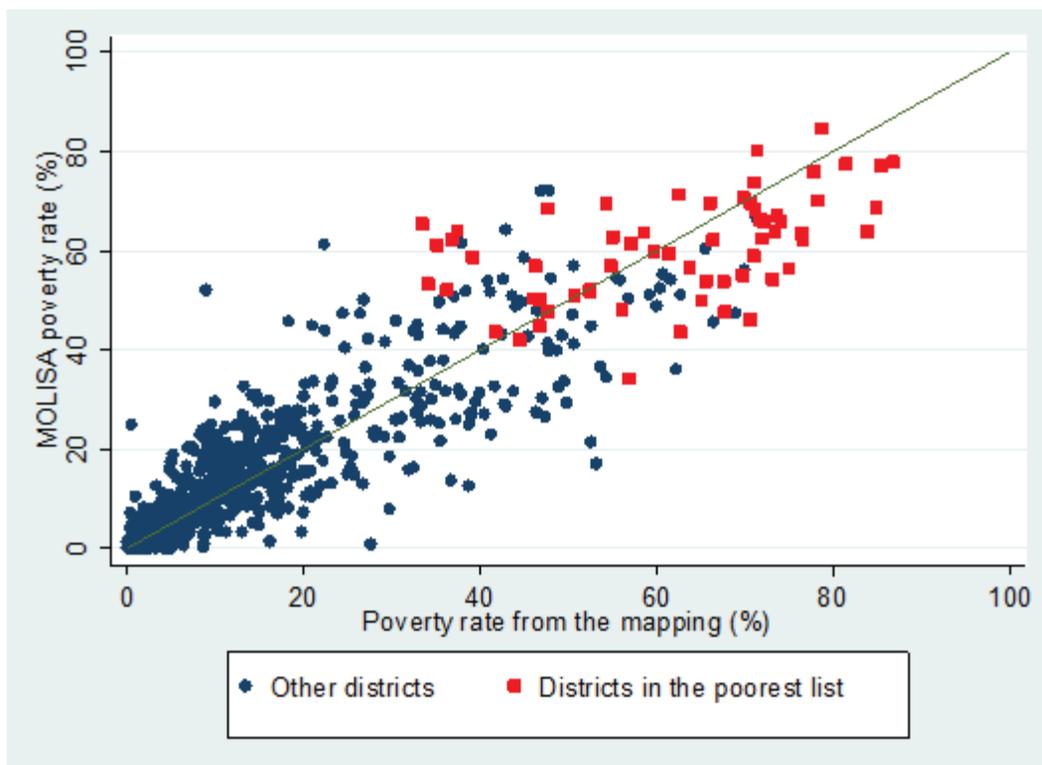
#### Box 4.1 Overview of Program 30A

Program 30A, named after Prime Minister Decision 30A in 2008, is a comprehensive poverty reduction program targeted at 61 (now 62) of the country's poorest districts through 2020. These districts lie in 20 provinces throughout the country, but most of the districts are located in the northeastern mountainous region. The program focuses on four primary areas: (a) increasing income through production, job creation, and labor exports; (b) improving education standards; (c) improving the quality of local administrators; and (d) investing in infrastructure.

Funding commitments for the different components are made in three-year tranches. According to MOLISA, state budget funding for 2009–11 was VND 8.5 trillion. For 2012–15, funding is VND 7.2 trillion. A substantial portion of the funding has gone toward boosting incomes by paying citizens to protect specified areas of forest. However, as with Program 135-II, the vast majority of funds are invested in infrastructure. Thus far, no attempt has been made to evaluate the impact of this program.

The 62 districts selected under Program 30A do not receive support directly only through 30A. Their designation as particularly needy districts also makes them eligible for other targeted programs. For example, in order to improve cadre quality, Program 30A is linked to the 600 Deputy Chairman Program, which is run by the Ho Chi Minh Youth League and the Ministry of Home Affairs. This program, initiated in 2011, targeted 600 communes in the 62 districts an additional (trained) person to support the People's Committee.

Figure 4.7 District Poverty: MOLISA compared to Poverty Map Estimates



## Annex 4. 1 The Spatial Distribution of Poverty and the Gains from Spatial Targeting

Chapter 4 documents changing patterns in the spatial distribution of poverty between 1999 and 2009. But what do these patterns imply for the design of policy? A series of simulations was carried out to assess how much the spatial disaggregation provided by poverty maps can help to improve area-based targeting schemes in Vietnam.<sup>26</sup> We consider here the distribution of a hypothetical budget to the population of Vietnam. We assume that we have no information about the poverty status of this population other than the geographic location of residence and the level of poverty in each location. As a benchmark case, we make the extreme assumption of no knowledge whatsoever about the spatial distribution of poverty, in which case our given budget is distributed uniformly to the entire population. We set up a series of comparisons to this benchmark, where we assume knowledge about poverty levels in progressively smaller subpopulations. For a given level of disaggregation, we ask how knowledge about poverty outcomes across localities can be incorporated into the design of a transfer scheme so as to improve the overall targeting performance relative to the benchmark case. In light of the observations made above, concerning the evolving spatial distribution of poverty in Vietnam, we ask whether and how our conclusions differ between 1999 and 2009.

We consider a transfer scheme that makes use of our knowledge of the spatial distribution of poverty in such a way that poverty is minimized at the national level. We consider the gains from spatial targeting at alternative levels of disaggregation. We focus on the squared poverty gap, a measure of poverty that is particularly sensitive to the distance between a poor person's income level and the poverty line.<sup>27</sup> We specify a poverty line that accords with a poverty rate of around 20 percent nationally, in each respective year, and we consider a modest hypothetical budget that would be insufficient, in and of itself, to eliminate all poverty, even if it were perfectly targeted at the household level.

The results from this exercise show clearly, first, that in both 1999 and 2009, there are potentially large gains in targeting performance from disaggregating to the local level. These benefits are clearly seen when we examine the squared poverty gap as our poverty measure of choice. The impact on the headcount rate is, unsurprisingly, more muted, given that we do not "optimize" our transfer scheme with respect to this poverty measure. An important corollary of these findings is that the benefits from spatial targeting become increasingly evident as more and more disaggregated data on poverty are used. We show that a given impact on poverty can be achieved at considerably less expense with detailed spatial targeting than with a uniform transfer.

The results from this exercise also show that the benefits from spatial targeting, at any level of disaggregation, are more clearly evident in 2009 than in 1999. This finding follows directly from the evidence presented in the earlier section on the changing spatial distribution of poverty in Vietnam over time. As Vietnam has prospered, moderately poor households living in relatively well-off areas in 1999 were able to traverse the poverty line, so that by 2009, such relatively well-off areas no longer contributed as much to overall poverty levels. Poverty has become more spatially concentrated. For policy makers, this is an important finding, because it indicates that there may be an even stronger rationale for spatial targeting of resources today than was the case a decade earlier.

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26 We build on an earlier analysis in Ravallion (1993), who finds that spatial disaggregation to the broad regional level in Indonesia, the lowest level at which household survey data provide reliable estimates of poverty, improves targeting, but only to a modest extent. In contrast, Elbers et al. (2007) find that fine geographic targeting offers significant benefits over broad targeting.

27 We focus on the squared poverty gap because of its appealing properties from both a conceptual and technical point of view. The basic approach explored here would also work for other poverty measures, particularly Foster-Greer-Thorbecke measures with values of parameter  $\alpha$  greater than 1. However, with the headcount measure (the FGT measure with  $\alpha=0$ ) welfare, "optimization" is not well defined and the approach taken here is thus less obviously applicable (see, for example, Ray [1998, 254–55]).

## Transfer Scheme

We postulate that the government has a budget,  $S$ , available for distribution and wishes to transfer this budget in such a way as to reduce poverty. We specify a baseline case in which the government is assumed to have no knowledge of who the poor are or where they are located. It is therefore unable to distribute its budget in any manner other than a lump-sum transfer to the entire population of size  $N$ . We thus calculate the impact of transferring  $S/N$  to the entire population.

Kanbur (1987) shows that to minimize poverty summarized by the Foster-Greer-Thorbecke (FGT) class of poverty measures with parameter value  $\alpha > 1$ , the group with the highest  $FGT(\alpha-1)$  should be targeted on the margin.<sup>28</sup> Hence, to minimize the squared poverty gap (equal to a poverty measure from the FGT class with  $\alpha=2$ ), target populations should be ranked by the poverty gap (FGT with  $\alpha=1$ ) and lump-sum transfers made until the poverty gap of the poorest locality becomes equal to that in the next poorest one, and so on, until the budget is exhausted.

## Budget and Poverty Lines

We assume that the budget available for distribution has been exogenously set. As is intuitively clear, the potential benefits from targeting will vary with the overall size of budget. In the limit, as the budget goes to infinity, there is no need for targeting, as even a uniform transfer will eliminate poverty. As a benchmark, we identify the per-capita consumption value of the 25th percentile of the consumption distribution.<sup>29</sup> We scale this consumption value by the total population. Our benchmark budget is set to equal 5 percent of this total value.

Gains from targeting also vary with the choice of poverty line. The higher the poverty line, the less need for targeting, as leakage to the nonpoor diminishes to zero. In this study, we select as the benchmark a poverty line that yields a poverty rate of exactly 20 percent in both 1999 and 2009.

## Simulating the Impact of Uniform Transfers

Our policy simulation in the case of uniform transfers is calculated in a very straightforward manner. Budget  $S$  is divided by total population  $N$ . The resulting transfer  $a$  is added to each predicted expenditure in our database, to yield  $y_{ch}^{(r)} + a$ . For each replication  $r$  we estimate post-transfer national poverty. The average across the  $r$  replications of the estimated posttransfer poverty rates yields our expected poverty rate associated with the benchmark, untargeted lump-sum transfer scheme. This new estimated poverty rate can be compared to the original national-level poverty estimate from the poverty map to gauge the impact of the transfer.

## Simulating the Impact of “Optimal” Geographic Targeting

Simulating the impact of the “optimal” targeting scheme is slightly more complicated. Following Kanbur (1987), we want to equalize the following expression across the poorest locations of a country:

$$(7) \quad G_c(a_c) = \int_0^z (z - y - a_c)^+ dF_c(y),$$

28 Following Foster, Greer and Thorbecke (1984), the FGT class of poverty measures takes the following form:

$$FGT(\alpha) = \left( \frac{1}{\sum w_i} \right) \sum w_i (1 - (x_i / z))^\alpha$$

where  $x_i$  is per capita expenditure for those individuals with weight  $w_i$  who are below the poverty line and zero for those above,  $z$  is the poverty line and  $\sum w_i$  is total population size. takes a value of 0 for the Headcount Index, 1 for the Poverty Gap and 2 for the Squared Poverty Gap. For further discussion, see Ravallion (1994).

29 The consumption distribution is constructed on the basis of the average, across  $r$  replications, of household-level predicted per-capita consumption in the population census.

which is  $z$  times the poverty gap in location  $c$ , after every person in the location has received a transfer  $a_c$ .  $F_c(y)$  is the average of the  $R$  simulated expenditure distributions of  $c$ . The function  $(x)^+$  gives the “positive part” of its argument, that is,  $(x)^+=x$ , if  $x$  is positive, otherwise 0. Transfers  $a_c$  (which must be nonnegative) add up to a given budget  $S$ :

$$(8) \quad \sum_c N_c a_c = S,$$

where  $N_c$  is the population size of location  $c$ . After transfers, there is a group of locations all sharing the same (maximum) poverty gap rate in the country. These are the only locations receiving transfers. We describe below how this problem is solved given that we are working with a database of incomes for every household in the 15 percent sample population census.

### Solving the Problem – “Optimal” Geographic Targeting

As described in Elbers et al. (2007), given our interest in minimizing the FGT2, optimal geographic targeting implies that after transfers there is a group of locations all sharing the same (maximum) poverty gap in the country. We determine the level of transfers going to each location by first solving a different problem. Following the notation introduced above, consider the minimum budget  $S(G)$  needed to bring down all locations’ poverty gaps to at most level  $G/z$ . This amounts to transferring an amount  $a_c(G)$  to locations with before-transfer poverty gaps above  $G/z$ , such that  $G_c(a_c(G)) = G$ .

Once we know how to compute  $S(G)$ , we simply adjust  $G$  until  $S(G)$  equals the originally given budget for transfers  $S$ . To implement this scheme, we must solve the following equation for  $a_c$ :

$$(A.1) \quad G = \int_0^z (z - y - a_c)^+ dF_c(y)$$

In what follows we drop the location index  $c$  for ease of notation. Using integration by parts it can be shown that

$$(A.2) \quad G(a) = \int_0^z (z - y - a)^+ dF(y) = \int_0^{z-a} F(y) dy.$$

In other words, we need to compute the surface under the expenditure distribution between expenditure levels  $y=0$  and  $y=z-t$ , for values of  $t$  up to  $z$ . Instead of computing  $G(t)$  exactly, we use a simple approximation. For this to work we split the interval  $[0,z]$  in  $n$  equal segments and assume that the “poverty mapping” software has generated expected headcounts for poverty lines  $z k/n$ , where  $k=0, \dots, n$ . In other words we have a table of  $F(z k/n)$ . Using the table we approximate  $F(y)$  by linear interpolation for  $y$  between table values. With the approximated expenditure distribution, it is easy to solve for transfers as a function of  $G$  (see below). In practice, we find that  $n = 20$  gives sufficiently precise results.

The computational set-up is as follows (note that the numbering we adopt means going from  $z$  in the direction of 0 rather than the other way around). Define  $b_0=0$ , and for  $k=1, \dots, n$ ,  $b_k$  as the surface under the (approximated) expenditure distribution between  $z-kz/n$  and  $z-(k-1)z/n$ , divided by  $z$ :<sup>30</sup>

$$(A.3) \quad b_k = \frac{1}{2n} (F(z - kz/n) + F(z - (k-1)z/n))$$

Let  $g_0$  be the original poverty gap, or in terms of the discussion above,  $g_0=G(0)/z$ . For  $k=1, \dots, n$ , put

$$(A.4) \quad g_k = g_{k-1} - b_k$$

30 Other interpolation schemes are possible. For instance, if the poverty gap is given at table values  $zk/n$ , an even simpler computation presents itself. Often, the poverty mapping software will give percentiles of the expenditure distribution. These can also be used for interpolation, but the formulas are more cumbersome, since the percentiles are not equally spaced.

The  $g_k$  are the poverty gaps of the approximated expenditure distribution for successively lower poverty lines  $z - kz/n$ . Let  $a_k$  be the per-capita transfer needed to bring down the poverty line to  $z - kz/n$ :

$$(A.5) \quad a_k = kz/n$$

We can now solve for per-capita transfers as a function of the intended poverty gap  $g < g_0$ :

Find  $k$  such that  $g_{k+1} \leq g < g_k$ .

The per-capita transfers resulting in poverty gap  $g$  are

$$(A.6) \quad a(g) = a_k + \frac{g_k - g}{g_k - g_{k+1}} \cdot \frac{z}{n}$$

This scheme can be implemented using standard spreadsheet software.

## Results

Table A4.1 presents the basic results from our simulations. Use of disaggregated data on poverty to allocate transfers gives better results than a uniform lump-sum transfer across the entire population. Targeting transfers to poor localities, in accordance with the optimization scheme outlined above, yields lower values of the national FGT2 than when the budget is transferred as a uniform lump-sum transfer to the entire population. Second, the more disaggregated the poverty map, the greater the improvement over a uniform lump-sum transfer. Our simulations suggest that using estimates of poverty at the province, district, and commune levels results in non-negligible improvements in the FGT2 with a given budget. However while the general patterns we observe are similar across our two poverty maps for 1999 and 2009, they are not identical. Notably, while commune-level targeting in 1999 would reduce the FGT2 from a level of 0.0110, following a uniform transfer, to 0.0058 with commune-level targeting (a 43 percentage point reduction), the improvement from commune-level targeting in 2009 would be 66 percentage points—the FGT2 declining from 0.0166 to 0.0057 (table A4.1). With district-level targeting rather than commune-level targeting, the gains are slightly less marked but are still evident.<sup>31</sup>

Table A4.2 repeats the simulations presented in table A4.1 but focuses now on the headcount, or FGT0, measure of poverty. As mentioned above, the optimization procedure outlined in Kanbur (1987) applies to the squared poverty gap or FGT2 measure. There is no analogous optimization algorithm for the FGT0 measure. We report in table A4.2, however, the resulting FGT0 estimates from having applied the procedure to allocate our budget in such a way as to minimize the resulting FGT2 measure. Table A4.2 indicates that the gains in terms of the FGT0 of geographic targeting are far less marked than was observed when the FGT2 measure was our reference measure.

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31 While targeting improves significantly as one is able to progressively disaggregate, for example, from the province, to district, to commune level, it remains far from perfect. Simulating the impact of optimal targeting of our postulated budget to individual households would result in a further decline in the FGT2 from 0.0057 in 2009 (table A4.1) to 0.0019. The fact that commune-level targeting is unable to reproduce what would be achieved with perfect, household-level, targeting confirms the findings from earlier sections that inequality at the subnational level in Vietnam can be significant; even with commune-level targeting, there would be significant leakage of resources to nonpoor households.

**Table A4.1 Impact on FGT2 of Targeting at Different Levels of Geographic Disaggregation  
Optimal Targeting Scheme**

Budget = 5 percent of (Total Population \* 25th Percentile Per Capita Expenditure)  
Poverty Line = per capita expenditure defining bottom quintile of population (pre-transfer)

	1999	2009
Original FGT2	0.0159	0.0234
FGT2 after:		
i) Uniform transfer	0.011	0.0166
ii) Province-level targeting (61/63 Provinces)	0.008	0.0096
iii) District-level targeting (614/685 Districts)	0.0066	0.0070
iv) Commune-level targeting (10474/10896 communes)	0.0058	0.0057
Original FGT2	1.00	1.00
FGT2 after:		
i) Uniform transfer	0.69 (1.00)	0.71 (1.00)
ii) Province-level targeting (61/63 Provinces)	0.50 (0.72)	0.41 (0.58)
iii) District-level targeting (614/685 Districts)	0.42 (0.61)	0.30 (0.42)
iv) Commune-level targeting (10474/10896 communes)	0.36 (0.57)	0.24 (0.34)

**Table A 4. 2 Impact on FGT0 of Targeting at Different Levels of Geographic Disaggregation  
Optional Targeting Scheme**

Budget = 5 percent of (Total Population \* 25th Percentile Per Capita Expenditure)  
Poverty Line = Per capita expenditure defining bottom quintile of population (pre-transfer)

	1999	2009
Original FGT0	0.2000	0.2000
FGT0 after:		
i) Uniform transfer	0.1673	0.1724
ii) Province-level targeting (61/63 Provinces)	0.1522	0.1555
iii) District-level targeting (614/685 Districts)	0.1443	0.1465
iv) Commune-level targeting (10474/10896 communes)	0.1390	0.1372
Original FGT0	1.00	1.00
FGT0 after:		
i) Uniform transfer	0.84 (1.00)	0.86 (1.00)
ii) Province Level Targeting (61/63 Provinces)	0.76 (0.90)	0.78 (0.91)
iii) District-level targeting (614/685 Districts)	0.72 (0.86)	0.73 (0.85)
iv) Commune-level targeting (10474/10896 communes)	0.70 (0.83)	0.69 (0.80)

## Discussion

The stylized analysis presented in this section cannot be used to directly evaluate existing poverty reduction programs in Vietnam. One possible exercise that could inform policy makers' deliberations is to compare the hypothetical "optimal" provincial- and district-level budgetary distribution deriving from an exercise as has been presented above with the actual provincial- and district-level distribution that is currently in place. There is no presumption that these two should line up exactly. But follow-up work would be justified if such an exercise were to reveal glaring inconsistencies.

There are important caveats attached to the findings reported here. First, we assume that the government is willing to accept that households with equal pre-transfer per-capita consumption levels might enjoy different post-transfer consumption levels. Second, we have assumed that the budget available for distribution is exogenously determined. We ignore the question of how the transfers are financed. Political economy considerations could influence options for resource mobilization (see, for example, Gelbach and Pritchett, 2002). Third, we do not address the very real possibility that the costs of administering a given transfer scheme might increase with the degree of disaggregation. Fourth, we do not allow for behavioral responses in the population. Fifth, we do not address the possibility that inequalities in power and influence that prevail in a community influence how transfers are allocated. All these factors could result in an overestimation of the impact of spatial targeting on poverty reduction.

The findings presented here are illustrative only. At all times, the gains from targeting should be juxtaposed against potential costs and political-economy considerations and should be scrutinized against other possible policy objectives. In practice, a combination of geographic targeting among villages and means-tested targeting within villages may be the best way forward. Policy makers in Vietnam will need to assess such programs on a case-by-case basis to determine just how far to rely on fine geographic targeting as a central element in their social protection and poverty reduction strategies.

## References

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# Chapter 5

## Reducing Poverty among Ethnic Minorities

*Data on poverty levels of ethnic minority groups in Vietnam is analyzed using multiple dimensions of well-being, such as access to education, water and sanitation, and public utilities. A combination of qualitative and quantitative methods shows the diversity of ethnic experiences, encompassing rural entrepreneurship, vulnerability to shocks, and ongoing stigma and disadvantage. While ethnic minorities' welfare has increased overall, poverty reduction has been uneven among ethnic groups and regions, resulting in a wider poverty gap between most ethnic minorities and the Kinh majority*

## A. Introduction

5.1 Ethnic minority poverty presents a particular and persistent challenge for Vietnam. Although households belonging to Vietnam's 53 ethnic minority groups have experienced rising living standards since 1998, they have not progressed as rapidly as the Kinh majority. As noted in Chapter 1, per-capita consumption grew at an annual rate of 7.4 percent for minorities between 1998 and 2010 compared to 9.4 percent over the same period for the Kinh. At the same time, ethnic minority households have become increasingly linked to the commercial market, while continuing some elements of traditional noncash livelihoods such as semi-subsistence agriculture and livestock raising (McElwee 2011; Turner and Michaud 2011).

5.2 Ethnic minority poverty rates have fallen as a result of rising incomes and expenditures. From a rate of 75.2 percent in 1998, the level of ethnic poverty (excluding the Hoa Chinese) fell to 50.3 percent by 2008, using the original General Statistics Office-World Bank (GSO-WB) poverty lines and methodology. This rate remains much higher than among the Kinh majority, however. The profile of ethnic minority poverty in Chapter 3 based on the new 2010 poverty lines suggests that disparities have risen; 47 percent of the poor in Vietnam are ethnic minorities, and the ethnic minority poverty rate is 66.3 percent. Although the well-being of minorities has increased in income and consumption terms, for many households these improvements have not been enough to put them over the poverty line. Yet, these same data also show that almost a quarter (24.9 percent) of ethnic minority households have escaped poverty since 1998.

5.3 The gap in reported poverty levels between Kinh and ethnic minorities increased rapidly during the earlier years of Vietnam's period of high economic growth and rapid poverty reduction. In 1993, a member of an ethnic minority group was only 1.6 times more likely to be poor than a Kinh person (see table 1.7). By 1998, this had risen to 2.4 times more likely, and by 2004, 4.5 times. By 2010, minorities were on average 5.1 times more likely to be poor than the Kinh and, as documented in Chapter 4, substantial gaps are evident throughout Vietnam.

5.4 The causes of persistent ethnic minority poverty have been researched in depth (ADB 2003; DFID and UNDP 2003; Oxfam and ActionAid 2009; World Bank 2009). The World Bank's 2009 "Country Social Analysis: Ethnicity and Development" found that minorities face disadvantages in access to education, mobility, credit, land, linkages to markets, and ethnic stereotyping by the Kinh majority (box 5.1). The reasons why some ethnic minorities have escaped poverty despite these barriers have received less attention, yet may offer suggestions of positive practices that can be incorporated into better-targeted and more innovative poverty reduction programs (Wells-Dang 2012).

### **Box 5.1 Six "Pillars of Disadvantage"**

The 2009 World Bank "Country Social Analysis: Ethnicity and Development" (World Bank 2009) identified three trends that account for different economic outcomes in minority and Kinh communities: differences in assets, differences in capacity, and differences in voice. Within each broad trend, there are numerous specific causal factors for ethnic minority poverty, summarized as six "pillars of disadvantage":

1. Lower levels of education
2. Less mobility
3. Less access to financial services
4. Less productive, lower-quality land
5. Limited market access
6. Stereotyping and other cultural barriers.

There is no single factor that explains the difference in outcomes among ethnic minorities and Kinh, even among those who live in the same areas. Instead, differences in these six areas combine in a "vicious cycle" to influence ethnic minority livelihood outcomes and lead both directly and indirectly to persistent poverty. The Country Social Analysis concludes that poverty reduction depends on comprehensive approaches to remove each of these pillars of disadvantage that minorities face.

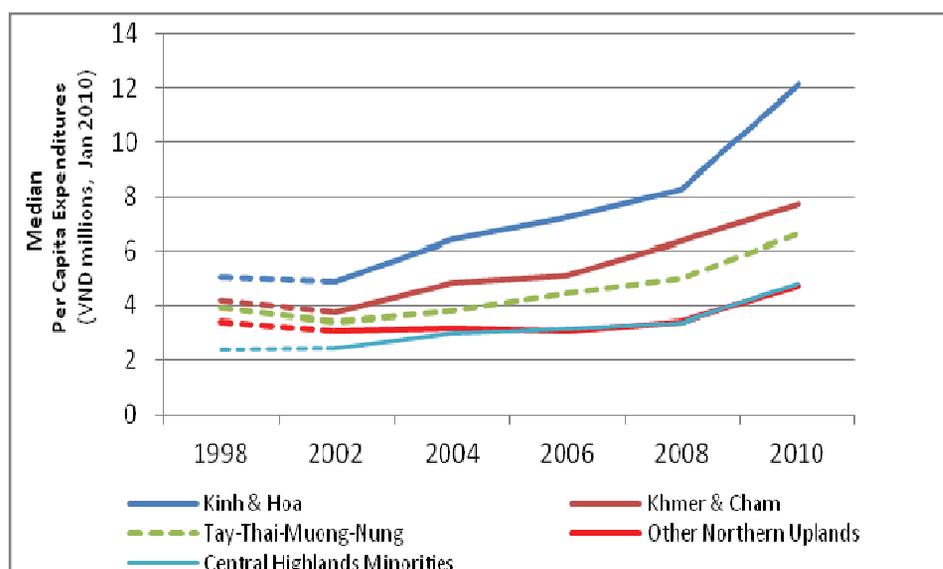
5.5 The gap in living standards between minorities and Kinh can be explained through reference to the structural disadvantages faced by minorities (box 1.1). Research shows that although minority household assets have improved over time—in particular, higher levels of education and better access to basic infrastructure and services such as roads, clean water and sanitation, and electricity—there is still a substantial gap in returns to assets between minorities and the Kinh (Baulch and Vu 2012; Imai and Gaiha 2007; Kang 2009). A contributing factor to the ethnic poverty gap is the fact that minorities continue to work primarily in agriculture (Chapter 3), which has grown more slowly than other sectors of the economy. The gap, however, may be overstated due to measurement errors, subjective linking of minorities and poverty by researchers and officials, and the likelihood that some minorities have unreported and noncash income sources that are not captured in the statistics.

5.6 This chapter draws on the broad framing of ethnic minority poverty in Chapters 3 and 4, with the aim of looking in greater depth at the situation and challenges faced by diverse ethnic minority groups, and examples of successful development for specific groups and in various regions.

## B. Ethnic Minority Poverty Reduction Varies across Regions, among and within Ethnic Groups

5.7 Results from poverty mapping (Chapter 4, also Nguyen, Lanjouw, and Marra 2012) demonstrate that ethnic minorities are not a homogeneous group. Figure 5.1 disaggregates changes in living standards among four broad categories of ethnic groups that share certain cultural, geographic, and social similarities. Among these four categories, the Khmer and Cham have seen the largest increases in incomes and have the lowest overall poverty rates. From 1998 to 2008, poverty fell steadily for all groups except Central Highland minorities; however, there are some indications that progress is slowing. In 1998, minorities in the Central Highlands had the highest poverty and lowest expenditures, but by 2010, this distinction had passed to groups in the Other Northern Uplands category, including the Hmong and Dao and many smaller ethnicities.

**Figure 5.1 Changes in Welfare Levels (per-capita consumption) for different Ethnic Groups in Vietnam, 1998-2010**



Source: World Bank estimates from various rounds of the Vietnam Household Living Standard Survey (VHLSS): comparable per-capita consumption during 1998 and 2002; comprehensive per-capita consumption during 2004–10.

5.8 Table 5.1 shows the predicted poverty headcount, poverty gap, and mean per capita expenditures in 2010 for the 20 largest ethnic groups in Vietnam (listed in order of population size), using the poverty mapping methodology presented in Chapter 4.<sup>32</sup> Attention is confined to rural areas since this is where the vast majority of ethnic minority people live (84.3 percent, according to the 2009 Census). Of the largest ethnic minority groups, the Tay and Khmer have relatively low poverty rates and high per-capita expenditures, while the figures for the Hoa (Chinese) are higher than for the Kinh majority. Poverty rates can vary significantly among ethnic groups residing in the same region, as shown in the differences between the historically more prosperous Tay, Nung, Thai, Muong, and other northern minorities such as the Hmong and Dao. These groups, and many Central Highlands minorities, have poverty rates over 75 percent and poverty gaps of over 25 percent. Compared to the 1990s, however, the difference between Central Highland minorities and others has gradually decreased, continuing a trend that was noted in earlier VHLSS surveys (Baulch, Pham, and Reilly 2007).

**Table 5.1 Poverty and Median Expenditures of Major Ethnic Groups in Rural Areas, 2009**

	Ethnic Group	Poverty Headcount	Poverty Gap	Mean Per Capita Expenditures	Primary region
1	Kinh	17.0	3.6	12,145,000	—
2	Tay	46.5	13.0	9,918,800	N. Mountains
3	Thai	69.1	22.6	7,210,600	N. Mountains
4	Muong	56.3	16.8	8,603,800	N. Mountains
5	Khmera	43.2	11.6	9,976,300	Mekong Delta
6	Hoa	13.4	3.1	19,727,500	Mekong Delta
7	Nung	56.0	17.5	8,611,600	N. Mountains
8	Hmong	93.3	45.3	4,455,100	N. Mountains
9	Dao	75.6	27.9	6,456,900	N. Mountains
10	Gia Rai	81.9	32.2	5,754,600	C. Highlands
11	Ede	75.1	27.6	6,460,100	C. Highlands
12	Ba Na	86.2	36.6	5,311,400	C. Highlands
13	San Chay	57.2	17.0	8,263,300	N. Mountains
14	Cham	57.2	17.0	8,504,100	South-Central
15	Co Ho	76.2	28.1	6,329,300	C. Highlands
16	Xo-Dang	91.1	42.4	4,760,600	C. Highlands
17	San Diu	37.5	10.2	11,132,400	N. Mountains
18	Hre	79.1	26.2	6,294,400	C. Highlands
19	Ra Glai	84.9	31.1	5,716,200	South-Central
20	Muong	80.9	32.9	5,828,000	C. Highlands

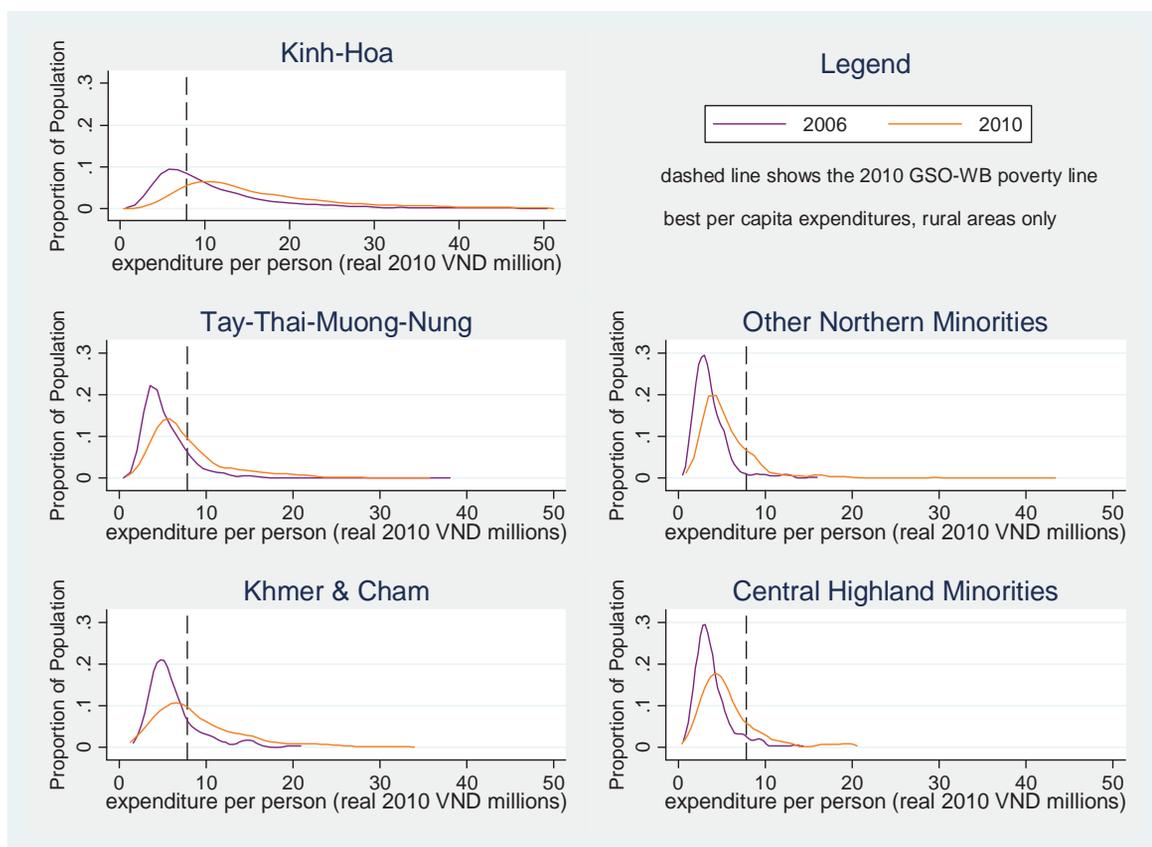
Source: Estimates based on poverty mapping methods described in Chapter 4 using 2010 VHLSS and 2009 Housing and Population Census.

Note: a. In Vietnamese, *Kho me*. The *H'Mông* and *Ê Đê* are also listed here by their common English names.

5.9 Figure 5.2 shows the distribution of per-capita expenditures in 2006 and 2010 (based on the VHLSS) for the five ethnic minority groupings. Both the mean and distribution of expenditures improved for all groups from 2006 to 2010, resulting in declining poverty rates. The peak of the distribution curve for Kinh and Hoa is now far past the 2010 GSO-WB poverty line. For the Tay, Thai, Muong, and Nung, and for the Khmer and Cham, the curve peaks near the poverty line. But for the Other Northern and Central Highlands minorities, the vast majority of households still live well below the poverty line, despite improvements in the upper and middle ends of the expenditure distribution between 2006 and 2010.

32 The sample size in the VHLSS is too small to permit disaggregation by specific minority groups; hence, we use mapping methods based on the 2009 Housing and Population Census.

**Figure 5.2 Real Per-capita Expenditures for Five Ethnic Categories, 2006-10**



Source: 2010 and 2006 VHLSS.

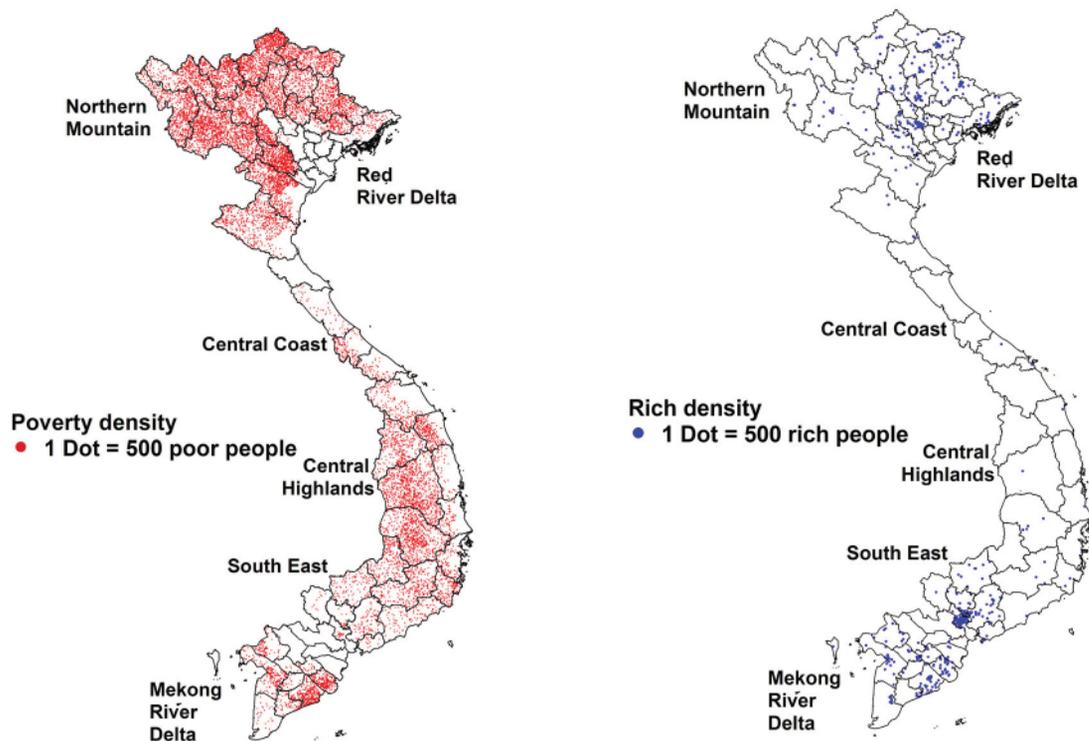
5.10 Focusing in further on specific ethnic groups in distinct locations increases the diversity of results. In Lao Cai province, for example, the Ministry of Labour, Invalids and Social Affairs reports an overall poverty rate of 43 percent. The Hmong (the most populous ethnicity in the province) have a reported rate of 83 percent, Nung 75 percent, and Dao 72 percent (Lao Cai DOLISA 2012). One of the smaller ethnic groups, the Phu La, have the highest reported poverty rate, at 84 percent. But not all very small groups are equally disadvantaged. The Tu Di, a subgroup of Bo Y, are involved in intercommunion and cross-border trade and have high reported educational attainment (Baulch and Vu 2012; Wells-Dang 2012). Central Highlands provinces such as Dak Nong are characterized by “complex patterns of inter-penetration between ethnic groups”; Kinh make up a majority of the population, have a 20 percent poverty rate, but make up 41 percent of poor people in the province. In-migrating northern ethnic minorities (Thai, Tay, Nung, Dao, Muong, and Hmong) comprise 20 percent of the population and 37 percent of poor people, with a poverty rate of 56.8 percent, and indigenous minorities (Ede, Mnong, Ma, and others) make up only 11 percent of the population and 21 percent of poor people, but their poverty rate is 63.8 percent (Shanks et al. 2012, 22–4).

5.11 Comparisons of 1999 and 2009 poverty maps (Chapter 4) indicate that the fastest poverty reduction has taken place among ethnic minorities in the Central Highlands. Of districts with at least 40 percent ethnic minority populations, seven of the 10 with the highest rates of poverty reduction are located in this region (three in Dak Lak and two each in Gia Lai and Lam Dong). Two of the others, in Quang Nam and Binh Dinh provinces, border the Central Highlands. All of these districts started from a very low income level in 1999 and have now reached a low to moderate level.

### Map 5. 1 Regional Patters of Poverty and Wealth for Ethnic Minorities

Poor ethnic minorities live primarily in mountainous regions in the north of Vietnam, and in the Central Highlands

The wealthiest minorities live in the Mekong Delta and Southeast regions, with some also in cities and towns in the Northeast Mountains



Source: Lanjouw, Marra, and Nguyen 2012.

5.12 As described earlier, poor ethnic minority households are still concentrated in mountainous and upland areas in the north of Vietnam and the Central Highlands. In contrast, the wealthiest ethnic minorities (defined as ethnic minorities with per-capita expenditures in the top 15 percent of the national expenditure distribution) in Vietnam primarily (57 percent) live in the Mekong Delta and Southeast regions. A third area with a concentration of wealthier minorities is in cities and towns in the northeast mountains. The lowest reported welfare levels for ethnic minorities are found in the northwest mountains and central coast areas (Quang Binh and Quang Tri). In the Central Highlands, Dak Lak and Lam Dong report average income levels, while other provinces are below average (map 5.1).

5.13 Among rural districts with more than 5,000 ethnic minority residents surveyed in the 2009 Census, nine of the top 10 are located in the Mekong Delta, and all have predominantly Khmer and Cham inhabitants. This includes four districts in Tra Vinh province and three in Soc Trang. Expanding the subsample to include urban districts, higher expenditure levels are found among ethnic minorities in Cao Bang and Lang Son cities, and in two peri-urban districts of Ho Chi Minh City (Hoc Mon and Binh Chanh), home to many migrant workers. Ethnic minority residents of these areas are predominantly Tay/Nung and Khmer, respectively.

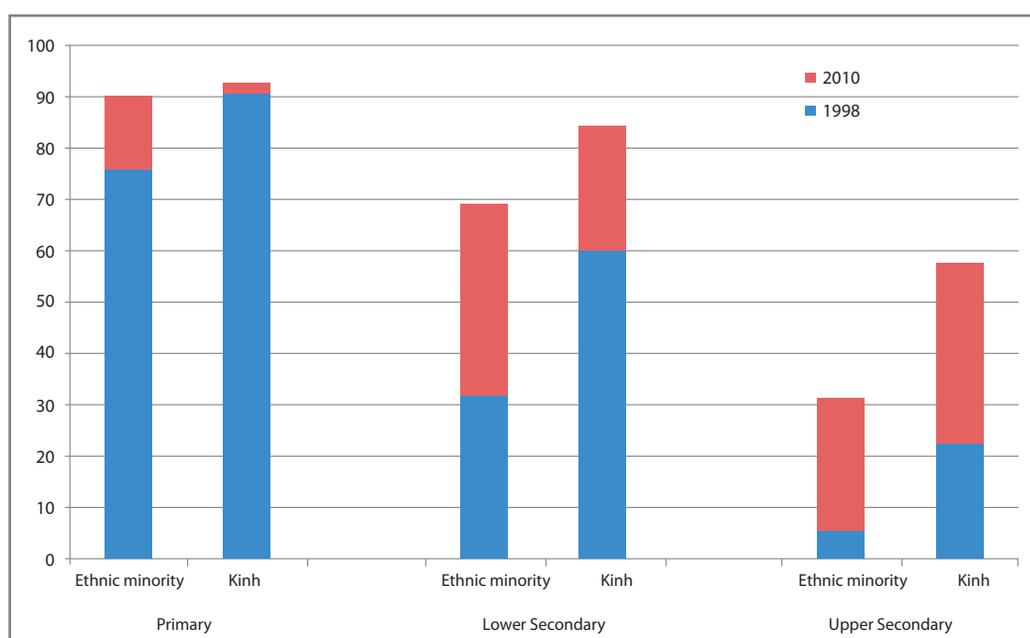
### C. Disparities in Access to Education, Infrastructure, and Public Services Accompany and Reinforce Ethnic Minorities' Poverty Reduction Outcomes

5.14 Including noneconomic indicators of well-being adds further complexity to the picture of differential development outcomes among ethnic minorities. For instance, relative gaps between Kinh and ethnic minorities have reduced access to education, due to increased numbers of schools, improved roads, and higher incomes among minority households (Hoang et al. 2012). Particularly at the primary and lower secondary level, ethnic minorities have greater levels of public school enrolment than in the late 1990s (figure 5.3). Primary school enrolments for ethnic minority groups are only a little lower than for Kinh but fall as children move through the school system. By the time they reach upper secondary school, majority pupils are more than twice as likely to attend school as minority pupils. This is in part a question of access, because most upper secondary schools are located far from rural villages, and in part one of formal and informal costs of secondary education. A focus group in Son La described these limitations:

*“Education [in our community] is good, drop-out rates at primary and lower secondary levels are low. We try to bring our children to school up the 12th grade. At upper secondary level the children have to go to school in the district town, renting rooms, bringing rice and vegetables from home, attending extra classes. Room rental is 150 thousand dong, pocket money 200–300 thousand dong per month at the lowest. But many households cannot afford such costs, their children have to drop out.”* (Hoang et al. 2012: 25)

5.15 As a result of increased access to public education, and to television and roads, the Vietnamese language capabilities of many young minorities are greater than in the past. Without upper secondary diplomas, however, employment options may remain limited for many young people, due to both location and discrimination. Data show that Khmer and Cham have relatively high incomes and better than average nutritional outcomes for children, but low secondary school completion rates in public Vietnamese-language schools affect subsequent job opportunities (Baulch et al. 2010). In the Central Highlands, local enterprises require upper secondary diplomas for most industrial jobs, leading to the exclusion of indigenous minorities from a wide range of possibilities (Truong 2011).

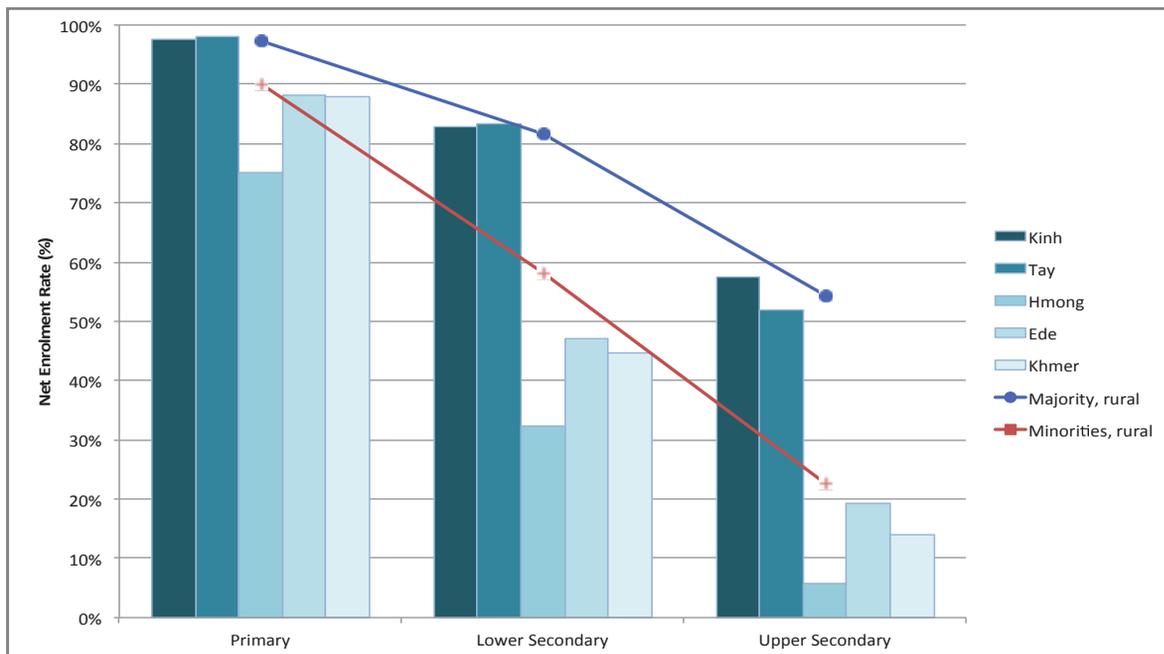
**Figure 5.3 Changes in Net School Enrolment Rates for Kinh and Ethnic Minorities in Rural Areas, 1998-2010**



Sources: 1999 VLSS; 2010 VHLSS.

5.16 Analysis of school enrolment rates from the 2009 Population Census shows that certain ethnic groups, including the Hoa, Nung, and Tay, have primary and lower secondary school net enrolment rates that are equal to or slightly higher than those of the Kinh (figure 5.4). In contrast, other ethnic groups have net primary enrolment rates of less than 85 percent and lower secondary rates under 50 percent, notably the Hmong, whose primary enrolment rate of 69.6 percent is nevertheless substantially higher than the 41.5 percent recorded in 1999. Primary school enrolment in the Central Highlands has also increased significantly since 1999. By the upper secondary level, only the Kinh, Hoa, and Tay have net enrolment rates greater than 50 percent, with 21 groups enrolling less than 10 percent of children in upper secondary school (Baulch and Vu 2012).

**Figure 5.4 Net School Enrolment of Selected Ethnic Minority Groups, 2009**



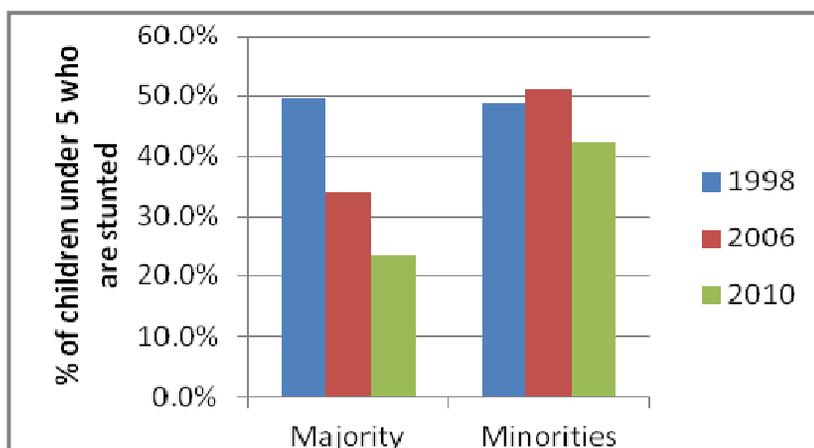
Source: 2009 Housing and Population Census.

5.17 Patterns of improved services and remaining inequalities may also be observed in access to public utilities. Coverage has improved since 2004 for both majority and minority groups in rural areas, but access for ethnic minorities is still unequal in terms of access to improved water, improved sanitation facilities, and electricity. Differential access is particularly stark for sanitation, where in 2010 around seven out of 10 majority households had access to improved sanitation facilities compared to fewer than two out of 10 for minorities. In contrast, more than two-thirds of ethnic minority households had access to an improved water source in 2010, with the Khmer and Cham having better access than the majority. This dramatic increase in access to improved water by minorities since 2004 may be partly attributed to Program 134, which, along with distributing land and building houses for ethnic minority households, had a clean-water component.

5.18 Improvements in access to improved water and sanitation have contributed to better nutrition among children. Drawing on anthropometric data from the 1998 VLSS, the 2006 VHLSS, and the 2010 Multiple Indicator Cluster survey (GSO, UNICEF, and UNFPA 2011), stunting (low height for age) has fallen rapidly and consistently among the rural Kinh from 49.5 percent of children aged 0–5 in 1998 to 23.3 percent in 2010. Meanwhile, stunting among minority children has fallen from

essentially the same level (48.7 percent) as the Kinh in 1998 to 42.3 percent in 2010, with a slight rise in 2006 (figure 5.5).<sup>33</sup>

**Figure 5.5 Stunting among Children under Age 5 in Rural Areas, 1998-2010**



Source: 1998 VLSS, 2006 VHLSS, 2010 MICS.

5.19 Wasting (low weight for height)<sup>34</sup> is a short-term measure of nutritional status that is often seasonally dependent. It also records a decline from 1998 to 2010, although with very small changes between 1998 and 2006. Children under 5 years of age from both the majority and minority started with similar levels of wasting (just under 12 percent) in 1998, with wasting declining to 3.9 percent among majority children compared to 5.5 percent among minority children by 2010. The stunting and wasting statistics provide evidence of a widening gap in nutrition of majority and minority children.

5.20 Investment in rural electrification during the 2000s has improved access to grid electricity to near universal levels for the majority, but over a quarter of ethnic minorities rely on other sources of power for their main source of lighting (table 5.2). Access to electrification in the Central Highlands is greater than in the northern mountains, even though both are upland areas with significant hydropower resources.

33 Due to sample size considerations and less detailed ethnic codes in the 2010 MICS, it is not possible to disaggregate these nutritional results into the five broad ethnic categories used earlier. However, stunting (and wasting) is generally lower among the (better off) Tay-Thai-Muong-Nung category.

34 Defined as weight for height z-scores less than two standard deviations from the 2006 World Health Organization child growth standards.

**Table 5.2 Access to Public Utilities by Ethnicity in Rural Areas, 2004-10**

Percent of Households with Access to:							
Electricity Grid	Improved Water		Improved Sanitation				
	Ethnic Category	2004	2010	Facilities		2004	2010
				2004	2010		
Kinh and Hoa	89.1	90.9	46.8	69.2	94.5	98.9	
All Ethnic Minorities <sup>a</sup>	53.3	69.6	9.9	18.4	72.5	83.2	
Khmer-Cham	85.9	93.6	5.5	13.8	69.0	84.2	
Tay-Thai-Muong-Nung	52.0	68.8	13.4	23.6	74.0	87.4	
Other Northern Mountains	37.1	64.2	8.2	12.0	56.0	61.5	
Central Highlands	51.3	67.0	4.6	13.7	80.5	91.9	

Source: 2004 and 2010 VHLSS.

Note: a. Excluding Hoa.

5.21 In addition to intergroup and geographic differences, ethnicities are also internally heterogeneous. Hmong in one district of Lao Cai employ different livelihood strategies and cultural practices from Hmong in another, and the range of practices among Hmong within a single district overlaps with practices of other ethnic groups. Even within a single commune, there are frequently significant differences in poverty rates among villages. In light of this diversity, poverty reduction and development programs that target “extremely difficult” geographic areas, or all ethnic minorities as an undifferentiated group, will inevitably benefit some populations more than others. Findings from the 2010 VHLSS indicate that this may be taking place. The mean ethnic expenditure gap is increasing at all levels of income except the highest sixth, where it has decreased slightly since 2004. Although some of the disparities are explainable by commune characteristics, much of the difference in returns to endowments faced by ethnic minorities depends on unobserved factors such as the quality of education or land combined with discrimination in access to employment and markets (Baulch and Vu 2012).

5.22 New research on “perceptions of inequality” carried out for this report suggests that ethnic inequality is one component of broader income and social inequalities (Hoang et al. 2012). Focus groups of ethnic minority youth, senior citizens, and local leaders emphasized livelihood-related modalities of inequality in terms of access to market, credit, and agricultural services. In rural areas such as Chieng Khoa commune, Son La, there was perceived to be little inequality within ethnic minority communities, since agricultural production remains the key source of livelihood. However, the transition to a commodity-based economy is seen as a source of growing inequality.

5.23 Ethnic minority focus groups identified inequalities of opportunity when comparing their communities with better-off towns nearby. The disparities noted link to the six “pillars of disadvantage” (box 5.1) and are perceived as linked; that is, poor infrastructure leads to poor education, poor employment, and then poor access to markets and services. Although some of these structural disadvantages can be corrected by policy measures, they continue to play an important role in keeping many ethnic minorities from earning a better living.

5.24 Agricultural land disparity is perceived as very important in determining outcome inequality in the rural mountainous ethnic minority areas of Son La and Quang Nam provinces, where off-farm employment and migration are negligible (Hoang et al. 2012). In Son La, rice paddy land was equally allocated among Thai households in the early 1990s. Better-off households expanded their rice fields by reclaiming vacant land, but such land is no longer available. The more important source of land disparity is in sloping land for maize and tea farming. Well-established households have

large holdings, while newly separated households and newcomers have little land and are often considered poor. In Quang Nam, by contrast, the Ve people (a branch of the Gie Trieng ethnic group) do not see land disparity as a key driver of increased wealth disparity, which results instead from livestock ownership and access to public sector employment. Ve households can still expand their cultivated area based on the availability of labor.

5.25 The perceptions of inequality study found little concern about interethnic inequalities. Thai people in Son La admit that they are more advantaged than Hmong people in terms of access to infrastructure, education, and markets, but feel disadvantaged in terms of land quality and quantity. These differences appear to be decreasing over time, in part due to government investment in infrastructure. Similarly, commune officials in Quang Nam draw comparisons between the Ve people and the larger Co Tu group, who live in more central parts of the district with better access to markets and employment.

5.26 However, many minority respondents raised concerns about unfair behavior of the Kinh toward ethnic minorities. Such behavior and related prejudice was widely perceived to have serious implications for social unity and ethnic cohesion. Minority youth living nearer provincial towns and cities experience ethnic discrimination in their schooling, employment, and social relations, as in this example of a young Nung woman in Lao Cai:

*“As we [people from the ethnic minorities] can be recognized by clothing, the way medical staff treat people from the ethnic minorities is different from the way they treat Kinh people. They [doctors] don’t treat us well ... In the market, Kinh people who are cleverer usually get good bargains ... In a bus, their (Kinh) prejudice towards us is demonstrated through language and intonation, shouting with disrespectful words.”*

5.27 Kinh focus groups in the inequality perceptions study, by contrast, denied that they discriminate against ethnic minority groups, and many believe that minorities receive special benefits. A Kinh student in Quang Nam stated:

*“We don’t think we are superior to the ethnic [minority] classmates. They are receiving preferential treatments such as subsidies and scoring incentives. Perhaps they themselves feel inferiority; there is no discrimination from us.”*

## **D. The Experiences of Ethnic Households that have already Escaped Poverty Offer Lessons and an Innovative Orientation for Future Policies and Programs**

5.28 The Vietnamese government, with World Bank and donor support, has implemented an array of economic policies since the 1990s, such as land reforms, infrastructure investments, education and vocational training projects, and agricultural commercialization efforts. These policies have brought many Vietnamese into the growth process and have succeeded in reducing poverty among the Kinh more than twice as rapidly as among ethnic minorities (Pham 2009). The remaining poor are thought to be less easy to help (DFID and UNDP 2003; Oxfam and ActionAid 2008). This situation has led to pessimism about the likely effectiveness of future development programs, mixed with reinforcement of stereotyping of ethnic minorities as culturally “backward” (*lac hau*), uneducated, and unwilling to develop themselves. Meanwhile, anthropologists and other external observers have criticized the Vietnamese government and donor agencies for perceived assimilationist policies leading to a decline in cultural identity among ethnic minority groups (McElwee 2004; Taylor 2004). Although government officials, donors, and academics may reach divergent conclusions, they share a common constraint-based approach to analysis, looking for what is wrong with a situation and how it can be fixed.

5.29 In background research for this Poverty Assessment, Wells-Dang and Nguyen (2012) adopted a contrasting approach of identifying communities that are succeeding where others are not, and sought

to understand the reasons behind their success. This approach, which bears some similarities to methodologies of “positive deviance” applied worldwide in health and business management sectors, aims to build confidence and social interactions among participants and points toward effective future project and policy interventions, something that a constraint approach is unlikely to do (Marsh et al. 2004; Ramalingam 2011). The research presumes that ethnic people are actively engaged in their own development as “innovative constructive agents ... not as resistance to domination, but as a logical or obvious response to new opportunities” (Sowerwine 2011).

5.30 Based on an analysis of census data on ethnic minority poverty reduction and expenditures, the research team selected field visit sites in Dak Lak, Lao Cai, and Tra Vinh provinces and sought to identify villages, or ethnic groups within a commune, that show uncommonly positive results in ethnic minority development and poverty reduction. All three provinces have been included in previous studies of ethnic minority poverty; Dak Lak was one of four provinces visited in the “Country Social Analysis” (World Bank 2009). Tra Vinh and Lao Cai were both included in the 1999 Participatory Poverty Assessments conducted by the World Bank and a group of international nongovernmental organizations (NGOs) (Oxfam 1999; World Bank 1999). It is also remarkable that both Lao Cai (ranked second of 63 provinces in 2010) and Tra Vinh (ranked fourth) score highly on the Provincial Competitiveness Index of business and investment criteria (USAID 2011).

## **E. Ethnic Minority Poverty Reduction begins with an Agricultural Transformation from Semi subsistence to Commercial Production**

5.31 Agriculture is the primary livelihood activity for ethnic minority communities in all three sites, as well as generally across Vietnam (World Bank 2009). In most communes visited for this study, 80 to 90 percent of households were involved in agriculture. Thus, any program of ethnic minority poverty reduction must include a strong agricultural component. Ethnic minority farmers have land holdings equivalent to or even higher than the average land holdings of Kinh, but their land is of variable quality (World Bank 2009, 113). In the Central Highlands, a coffee farmer with as little as 0.25 hectare of high-quality land can earn above the poverty line for a family of five. Vegetable and fruit growers in other provinces require approximately double this amount of land to reach the same income level.

5.32 Farmers with sufficient, quality land have multiple options to escape poverty. Those with less land can only do so through high-value cash crops, the opportunities for which depend on local soil and weather conditions. A third group of households, found mainly in the Mekong Delta, lost their land through indebtedness or sale. These families have mostly migrated or shifted to nonagricultural work, although some continue as agricultural wage laborers. Landlessness is no longer viewed as the crisis it was in the 1990s, given the increased availability of nonagricultural work and the possibility of migration.

5.33 Cash crop farmers are highly dependent on local and world market prices for their commodities. In this sense, they are already connected to the global economy, not at all “remote” (*vung sau vung xa*), as perceived by many urban Vietnamese (Taylor 2007). Coffee and other commodity farmers sell their crops to dealers (who are mostly Kinh), who then resell to export processing facilities in provincial cities. Ethnic minority farmers do not know where their crops are exported, but they do follow market prices, which are broadcast on television and radio, printed in newspapers, and posted at local offices. Cash crop farmers in border areas export their products directly or via ethnic and Kinh middlemen (box 5.2).

5.34 Since previous research on ethnic minority development (ADB 2003; Oxfam 1999; Oxfam and ActionAid 2008; World Bank 2009), certain key features of the agricultural economy have improved. One of these aspects is *price information*, mentioned above. Another is *better access to credit*, via the Social Policy Bank (*Ngan hang Chinh sach*) and the Vietnam Bank for Agriculture (*Ngan hang Nong nghiep*). According to data from the 2010 Vietnam Household Living Survey, 32.6 percent of all rural ethnic minority households and 52 percent of poor ethnic minority households have access to

preferential loans from the Vietnam Social Policy Bank and other sources compared to 10.4 percent of all rural Kinh and 35.2 percent of poor Kinh. In communes visited during background research for the Poverty Assessment, access to loans for ethnic households reached up to 80 percent. Loans are often channeled through local mass organizations; loan amounts have increased to a maximum of VND 30 million (US\$1,500) compared with 3 million VND to 5 million VND noted in the Country Social Analysis (World Bank 2009, 148).

5.35 Most respondents report using loans for purchasing seeds, raising animals, or small business activities, such as purchasing goods for a market stall. Borrowers through mass organizations receive some instruction and support for their stated use of the loan, such as agricultural extension or animal raising. Formal and informal farmers' groups play a significant role in agricultural production, particularly among Khmer in Tra Vinh. These cooperative groups (*to hop tac*) exchange price and technical information, produce cash crops cooperatively for fixed-price contracts, and link poor and better-off farmers in a community.

5.36 Ethnic minority farmers are skilled at producing crops, raising animals, and other agricultural activities. However, their relative position in the market has weakened over time; many of the benefits of economic growth have accrued to better off households and those working in industrial and commercial activities. (Chapter 6) Few ethnic minorities are represented in these groups. The lower relative returns to agriculture are in part a result of policy decisions that have a disproportionate effect on ethnic minorities. Future growth in agricultural livelihoods is also threatened by risks and vulnerabilities such as changes in commodity market prices, natural disasters, climate change, and environmental degradation.

#### **Box 5. 2 An Ede Coffee “Hotspot”**

Ede are the largest indigenous ethnic group in Dak Lak, although they make up less than 20 percent of the total population. Before waves of migration after the Vietnam War, Ede were the only residents of Ea Khal commune, extending 20 kilometers westward from the provincial town of Ea Drang. Now there are 16 villages in the commune, of which only two are indigenous Ede. One of these is Buon Dung, about 2 kilometers from the commune center, an Ede village with high incomes from coffee and other crops. According to commune statistics, overall poverty rates in 2011 were 23 percent for Ede, 34 percent for other ethnic minority in-migrants, and 16 percent for Kinh. In Dak Lak province overall, 50 percent of ethnic minorities are considered poor. Thus, Ede in Ea Khal are less than half as poor as average ethnic communities in the province.

Young Ede coffee farming families in Buon Dung have between 1 and 4 hectares of good-quality fields and are accessing large, high-interest loans from the Vietnam Bank for Agriculture. They have taken part in technical training on coffee production organized by agricultural extension services or the Farmer's Union. Cognizant of the risks in coffee production, they monitor prices carefully to get the best return for their crop. The village also has storage and drying facilities, so farmers can wait until prices are high before selling.

After several years of good harvests, families are investing their profits in additional land purchases in neighboring villages and in construction of new houses in a mixture of traditional Ede and Kinh styles. The reasons for their relative prosperity include access to land, social cohesion, and preferential treatment of indigenous minorities by local authorities.

## **F. Successful Ethnic Farmers are Beginning to Diversify into Nonagricultural Employment, Particularly in Areas with Access to Major Cities or International Markets**

5.37 Diversification is a key, though not universal, feature of ethnic minority livelihood strategies, moving from subsistence production to a multiplicity of activities and income sources (Minot et al. 2006; Shanks et al. 2012, 51). Agricultural work remains the norm for the majority of ethnic minority families, but most respondents plant multiple crops—grain in the wet season and vegetables in the dry season, a combination of hybrid and traditional rice and maize seeds, or a mixture of export cash crops. Almost all ethnic households raise some animals for household use or sale. Of families pursuing nonagricultural livelihoods, such as factory work, trading, or tourism, nearly 100 percent maintain some tie to agriculture, at a minimum through usufruct rights of leased land. With the exception of a few large export dealers, ethnic minorities view handicrafts, tourism, trading, and other service employment as a complement to agriculture. This strategy of “selective diversification” simultaneously allows for cultural preservation and higher incomes (Turner and Michaud 2011).

5.38 The involvement of ethnic minorities in nonagricultural work varies from very little in Dak Lak and modest in Lao Cai to significant in Tra Vinh, where Khmer are involved in all kinds of trading, services, and industrial jobs. Factory work has become available in Tra Vinh since 2007 and now employs 30,000 workers province-wide, primarily women under age 35. Base salaries in such factories are substantially lower than in Ho Chi Minh City, but living costs are also lower by a factor of a third or more. For some Khmer families, industrial work offers a stable income and a way out of poverty even for a family with little (or no) land. Respondents said they preferred to stay in their own communities rather than migrate for industrial work, even though local salaries are lower.

5.39 Local ethnic minority traders in Muong Khuong, Lao Cai, use their comparative advantages of a location on the Chinese border, relationships with relatives and others of the same ethnic group across the border, and knowledge of the regional Chinese dialect Quan Hoa. One young Hmong man who had spent several years as a laborer in China is now trading mineral ore and other products across the border, earning enough to purchase a private car. A Phu La-Nung couple in another village began by trading rice and corn in local markets, then took advantage of available loan capital and switched to pineapple growing in 2009 (box 5.3). In these cases, ethnic minorities are no longer only clients of Kinh private traders, as was the case a decade ago (DFID and UNDP 2003). Their involvement in business contributes to a leveling of opportunities and information, as shown by a decrease in complaints by ethnic minorities about being cheated or unfairly treated in market transactions with the Kinh. Near border areas, ethnic minorities may have more trading connections than Kinh do. Ethnic business owners are also more likely to employ minority staff, adding to the limited job opportunities in the local private sector.

5.40 Figure 5.6 describes the sources of income of Kinh and minorities in rural areas based on the 2010 VHLSS. Apart from the substantial difference in overall household incomes, the figure reveals three outstanding factors (Baulch and Vu 2012). First, nonagricultural wages make up a much smaller part of ethnic minority income compared to Kinh. This was true even controlling for income; poor Kinh have more diversified earnings and income portfolios than poor minorities (Chapter 3). Second, minority households earn very little from nonfarm enterprises, consistent with the dominance of Kinh traders found especially in the Northern Mountains (Wells-Dang 2012; World Bank 2009). Finally, income transfers, including private remittances and public programs, are considerably lower among minority households, a result of lower domestic migration and access to public services (Baulch et al. 2010).

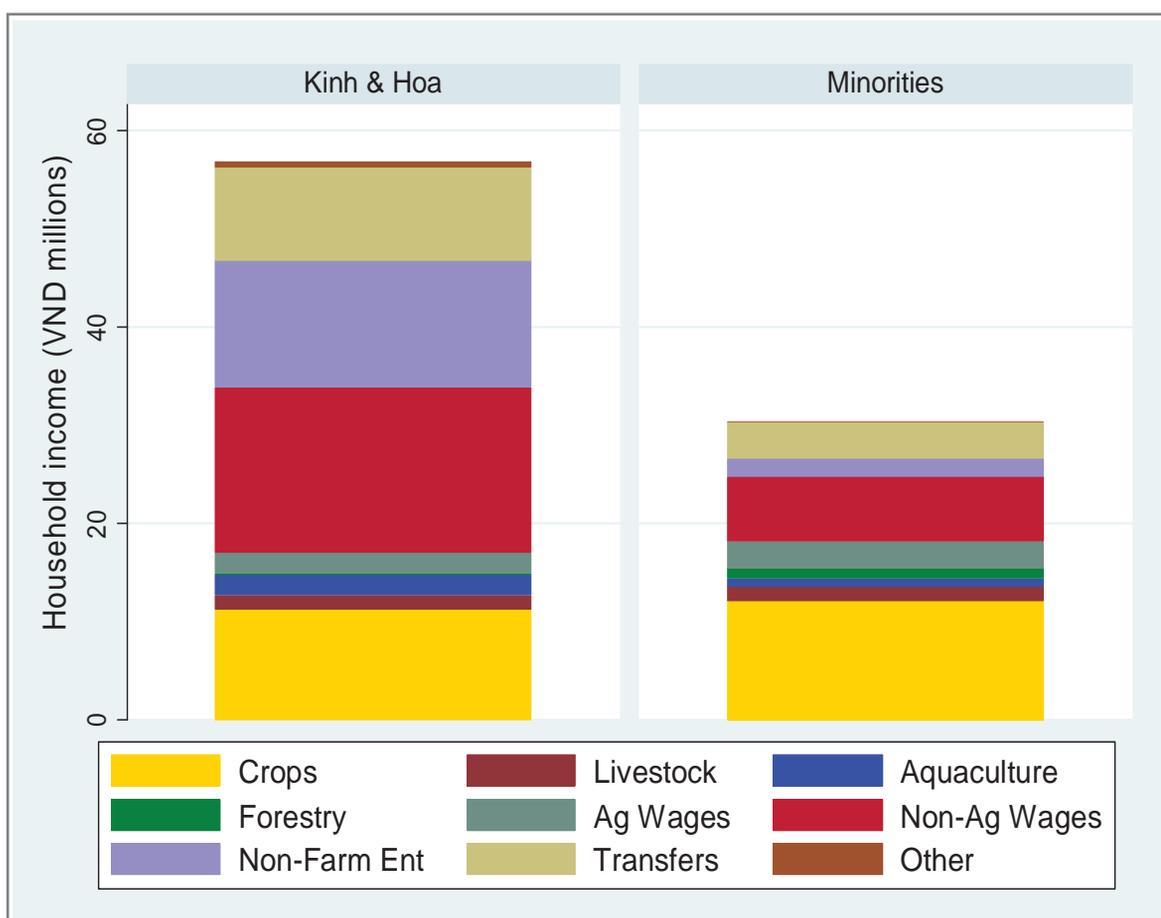
### Box 5.3 Pineapples along the Border

Na Loc, a cluster of seven villages in Ban Lau commune, Muong Khuong district, Lao Cai, extends through a narrow valley on one side of a small stream: the Chinese border. Hmong farmers in Na Loc have long had close links to the Chinese market. In the 1990s, three men crossed into China to work as wage laborers and brought back techniques of pineapple cultivation that they introduced to other villagers. One of the first pineapple growers later became a village chief.

Na Loc villagers have gained high profits from pineapple for over 15 years, earning incomes of 150 million VND (US\$7,500) per year or more. Since around 2005, cash crop production has spread from Na Loc to other villages in Ban Lau commune. Almost all land in the commune, including steep hillsides, has been converted to pineapple, banana, and tea production. Returns were high until 2012, when Chinese buyers suddenly stopped purchasing pineapple and Vietnamese market prices plunged to as low as 1,000 VND (US\$0.05) per kilogram. Farmers in Na Loc are now struggling to break even, but most are sufficiently diversified and have accumulated enough savings that they believe they can ride out the downturn.

This experience, like that of coffee in the Central Highlands, shows that long-term poverty reduction cannot depend on a single commodity.

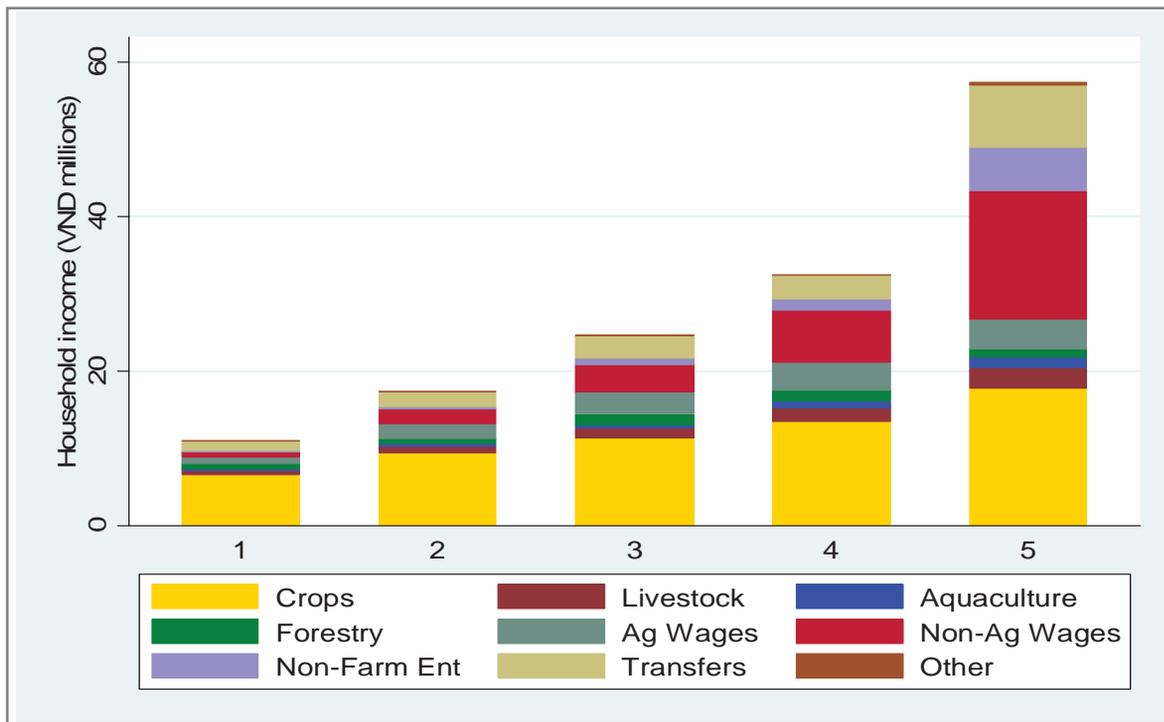
Figure 5.6 Sources of Income for Majority and Minority Households in Rural Areas, 2010



Source: 2010 VHLSS.

5.41 Income sources vary across the distribution for minority households (figure 5.7). Crop incomes almost double from the poorest to the richest quintile, while nonagricultural wages increase by a factor of 10. Income from forestry, aquaculture, and agricultural wages remains roughly constant across quintiles and does not contribute significantly to income gains. Income from nonfarm enterprises is negligible for quintiles 1 and 2, and then expands rapidly in the top three quintiles. These patterns are broadly consistent with the patterns of diversification identified in qualitative research, showing that rural households generate a surplus from agriculture first before investing in a nonfarm enterprise. For the richest quintile, transfers (in particular remittances) are also important, since households at this income level may have family members working in cities, government jobs, or other nonagricultural positions.

**Figure 5.7 Sources of Income by Quintile for Minority Households in Rural Areas, 2010**



Source: 2010 VHLSS.

5.42 The data on sources of income and diversification suggest that minority households generally earn a relatively small share of their incomes from nonagricultural wage employment. This is principally because ethnic minority workers find it more difficult to obtain wage jobs than the majority, but differences in wage rates also play a role. In 2010, 28.8 percent of ethnic minority households had wage workers compared to 60.5 percent for the majority. Ethnic minority workers in rural areas earn on average 13.8 percent less than Kinh workers, and gaps remain even after controlling for education and sector of employment. While some of this differential may be attributable to differences in education and experience, wage differentials are also substantial for workers with secondary education or university qualifications.

### G. Most Ethnic Minorities Continue to Live in their Communities of Origin

5.43 In the Central Highlands and Northern Mountains, there are few cases of young indigenous minorities migrating to cities for industrial work. Migration from the north to the Central Highlands has also slowed. Provincial officials stated that a majority of ethnic migrants who had gone to work in urban factories in the past five years have returned home for a combination of economic and cultural reasons. In most instances, the wages available are relatively low. Ethnic minority informants,

including some returned migrants, stated that they preferred to stay in their communities and do not feel confident or comfortable in large cities. The reasons given for the low levels of out-migration are that agricultural work is available locally, net returns from work in cities are not much higher, and living far away from home is not culturally comfortable. If more industrial and service jobs were available locally, informants indicated that they would be willing to work in these sectors.

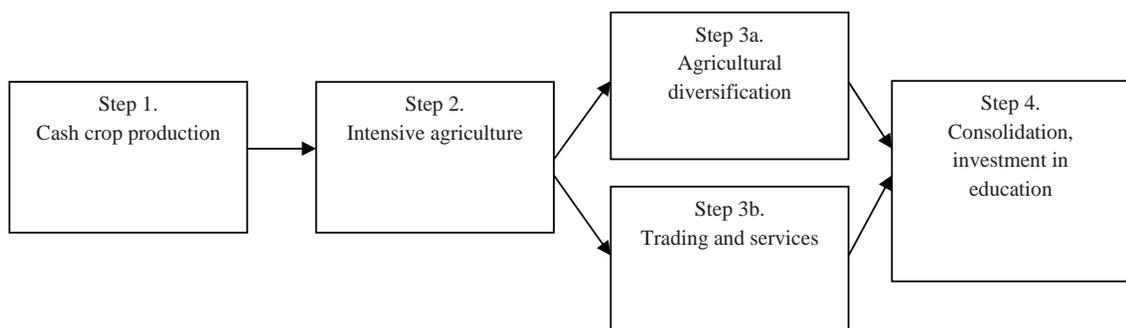
5.44 Out-migration of ethnic minorities is a significant pattern only in the Mekong Delta. According to Tra Vinh officials, there are now 80,000 workers from the province in and around Ho Chi Minh City, about half of them Khmer. Both poorer and better-off Khmer practice migration as a strategy, but for different purposes. Those with large land holdings (or established nonagricultural businesses) send their children to urban areas for education and subsequent entry into white-collar professions such as teaching, business management, and public sector employment. The land-poor and landless, by contrast, migrate for employment and survival, acquiring skills and knowledge in the process that raise their incomes over the poverty line, but at a social cost of distance from their home communities.

5.45 Many poor and landless young people, especially women, move to the city to look for work when they reach adulthood. The pace of migration has remained relatively constant in recent years, with few migrants returning to the Delta permanently (Oxfam and ActionAid 2009). Given the high cost of living in the city, few workers are able to send much money back to their families. Migration is thus more an employment strategy than a source of remittances. Without the safety valve of migration, land holdings would be divided into smaller pieces and it would become more difficult to find nonagricultural work nearby. Local officials do not view migration as a problem, but rather as one of a number of livelihood strategies practiced by local households.

## H. Ethnic Minority Poverty Reduction Strategies Follow a Series of Steps from Agricultural Specialization to Diversification and Accumulation of Financial, Social, and Cultural Capital

5.46 Despite regional and cultural diversity, ethnic minorities in Vietnam share certain important characteristics in common. They all reside in the same nation-state, with the same national policies and structures; they all largely practice agriculture; and all must define and maintain their identities in relation to a much larger ethnic majority group that controls most important political, economic, and social institutions. To escape poverty in these conditions, ethnic minorities first shift from semi-subsistence agriculture to a market orientation, then make efforts to maintain their cultural identity while building financial and social capital. This process, outlined in figure 5.8, has four main steps toward success, with agricultural and nonagricultural branches.

**Figure 5.8 Paths to Successful Ethnic Minority Development**



Source: Wells-Dang 2012.

5.47 In step 1, poor households with average land holdings and land quality shift part of their available land (or one planting season) away from semi subsistence grain production and begin planting a cash crop. In Dak Lak, this is usually coffee or sometimes pepper; in other locations,

vegetables and fruit are common cash crops. The key requirements for cash crop production are capital to purchase fertilizers, water for irrigation, and technical knowledge to achieve a decent yield. Many households meet part of the initial capital outlay through a loan from the Social Policy Bank, supplemented by no-interest loans from relatives and community members, as well as support from other government programs. However, fluctuating prices and climate conditions pose serious risks to getting started in cash crop production. Many families who are no longer classified as poor are still not yet confident of staying out of poverty in future years. According to a Jarai village chief in Ea H'leo district, Dak Lak, it takes a family about five years of small-scale cash crop production to achieve this confidence.

5.48 Once households amass some savings and experience in cash crop production, they next take the greater risk of concentrating their effort on a single product. This step requires a quantum leap into a fully marketized economy. These farmers have bought or leased small amounts of additional land where possible, even if far from their homes. Using this land as collateral, they begin to access higher-interest loans from the Vietnam Bank for Agriculture, although some continue to renew loans from the Social Policy Bank (some of which are open to ethnic minority borrowers regardless of poverty). They take part in technical training organized by agricultural extension services or the Farmer's Union. Compared to the farmers at step 1, they monitor prices carefully to get the best return for their crops and are highly conscious of price risks; the cost of failure would be extremely high.

5.49 In the agricultural variation of step 3, farmers who have achieved higher incomes from cash crop production—around VND 100 million per year for a family of five, or a per-capita income near the national average of US\$1,000—then take steps to reduce risk by diversifying into other crops or into larger-scale animal raising. Aquaculture, forestry, or tree plantations such as rubber are additional options for diversification in some areas for those with enough capital to purchase larger tracts of land and the ability to wait five or more years for returns. Households at this level have above-average landholdings and are eligible for larger loans from the Bank for Agriculture, although some have enough savings to avoid the need for loans. As experienced, successful farmers, they are well-known and respected members of their communities with good connections with commune- and district-level authorities.

5.50 Relatively few ethnic minorities have pursued step 3b in the diversification strategy model, to move into trading and services; those with significant nonagricultural income are typically located in the top income quintile (figure 5.7). Of ethnic minority households that do select nonagricultural diversification strategies, most are already successful commercial farmers first. They begin off-farm business activities by selling their own or neighbors' agricultural products at markets, then investing in a truck or small shop. After gaining experience and confidence, some traders and shop owners drop their involvement in agriculture entirely and concentrate fully on their new business. Others continue to be involved in both sectors. Once trading or service business becomes the primary livelihood of the household, fields are typically leased out or workers are hired to grow rice or corn, rather than more intensive cash-cropping. Families at this level receive (and require) little support from government programs.

5.51 The small number of ethnic minority households that reach step 4 in figure 5.8 have resources and savings above the national average. As their children approach adulthood, older farmers consolidate their status and further reduce risk by sending children for secondary and higher education in provincial cities or beyond. After graduation, children are then expected to get nonagricultural jobs to contribute to the family income. In most observed cases, children had not yet begun sending any funds back to their parents, but the presence of nonagricultural work balances the risk of the family farm or small business. Even among the most prosperous minorities, the researchers did not see

strong evidence of cultural assimilation at the village level; ethnic minority communities remain as distinct villages, with local languages spoken and social structures persisting. These results concur with findings from research in the northern mountains that identify “some models of development based on local knowledge that have reduced poverty and even made some people rich, while still preserving the value of traditional culture and the local environment” (Mai, Le, and Le 2011, 55–6). However, an unanswered question is how the lives of youth who access education in the cities will change in the future—whether it will be toward absorption into mainstream Kinh society or toward a renewed sense of ethnic identity.

5.52 Government programs are particularly important for households below or slightly above the poverty line, as a source of capital and livelihood inputs. No single program has been most effective at poverty reduction; instead, ethnic minority respondents point to the combination and interplay of several programs providing low-interest credit, infrastructure, housing, and cash transfers, and the role of farmers’ cooperative groups. Existing credit and extension services are mainly targeted to households with agricultural land; animal-raising training is an important exception. Land is held as collateral for interest-bearing loans. Most households that have benefited from Decree 167, which allocates land to the landless, have received residential land only; very few have received scarce agricultural land. Many of the changes brought about by these programs have taken effect since 2006, due to improved targeting of programs, greater availability of funds, and the benefits of higher market prices for agricultural products, among other possible factors.

5.53 Other government programs, including forestry, labor export, and vocational training, were assessed by interview respondents as contributing less to ethnic minority development and poverty reduction. The vocational training courses available from the local government are not yet well matched with market demand; as many as half of trainees have difficulty using skills after completing training. Training in local languages is available in only a few locations, such as the Women’s Union in Bac Ha district, Lao Cai, which uses Hmong staff in majority Hmong areas to reach its membership.

5.54 When asked about dreams for their children’s careers, parents across all ethnic minority groups said that they hoped their children would get an upper secondary or higher education and then a job in the state sector as a teacher or public official. No one expressed a desire for children to work in industry or business, with the exception of Khmer families already involved in trading in Tra Vinh. In Dak Lak and Lao Cai, some industrial jobs are available near the provincial cities, but few minorities work in these companies. In part this is because many do not meet the required educational qualifications, but even if they do, they may be labeled as “lacking knowledge,” part of the vicious circle of ethnic disadvantage. Since there are few private sector jobs in many mountainous areas, the thinking that “jobs are public jobs” persists. However, the number of government jobs available is also limited, so few young ethnic minorities who have completed secondary or higher education can be assigned to government positions. According to a youth focus group of Ve people in Dak Pree commune, Quang Nam,

*“We have many graduates, but few of them find jobs. I have seen many students who had no choice but came back to farming work. The year 2011 alone saw eight graduates from pedagogic schools, but only one of them could work on a fixed-term contract basis at the commune. The remaining seven students came back to farming work. It is not possible to apply for jobs in other districts, as they also have enough staff.” (Hoang et al. 2012, 30)*

## I. Prevailing Narratives of Ethnic Minority Livelihoods, Cultures, and Gender Relations are Shifting along with Diversified Development, although some Stereotypes Persist

5.55 Interview respondents, both community members and local officials, spoke of changing attitudes toward ethnic minority capacities and cultures. In this narrative, Ede, Khmer, Hmong, and other ethnic minorities are hard-working and serious, with high levels of intra-village cooperation. In some cases, having a critical mass of a minority population, including adequate representation in local leadership, was seen to promote greater equity (box 5.4). In Dak Lak and Tra Vinh, Kinh officials at the district and commune levels perceive a shift in ethnic minority work, savings habits, and lifestyles over the past decade (although these characteristics might have been true previously). Ethnic stereotyping was rarely heard of, and then most often in the past tense, sometimes from ethnic minorities themselves, as in “we used to be backward.” In Tra Vinh, for example, respondents said that previously Khmer planted only rice and did not work in the dry season, but when more opportunities became available, they adapted to cash crops and nonagricultural work. The local explanations offered for this change were the opportunity to become better off through cash crop production and the positive influence of education. The younger generation is becoming more literate in Vietnamese than their parents. Yet the question remains, with prevailing cultural stereotypes, whether or not formal education will lead to more employment opportunities in the future.

### Box 5.4 Equity in the Khmer Heartland

Luong Hoa A commune in Chau Thanh district, Tra Vinh, is a majority Khmer community with poverty levels that are average overall, but relatively equal between the two main ethnic groups. Both Kinh and Khmer officials spoke of equality, respect, and tolerance among ethnic groups. At the provincial and district levels, this came across as the party line, but in the three communes, relative equality is backed up by observations and data. In Luong Hoa A and other Khmer majority communes, Khmer appear to be doing as well as Kinh, even though this is not true district- and province-wide.

Among the factors leading to this success is, first of all, a cohesive Khmer majority population that is well represented in local leadership. In other words, the difference between Kinh and ethnic minorities is smaller in areas with a greater concentration of ethnic minority residents. If poverty is considered an “ethnic problem,” then this is a counterintuitive finding. Conversely, Khmer are relatively worse off in areas where Kinh are the majority. Where it is “normal” to be Khmer, then Khmer and Kinh appear to have relatively equal access to information and leadership positions.

5.56 A shift in gender patterns has accompanied the perceived cultural shift in work habits. Families that have transitioned to market-based livelihoods appear to have adopted a more equitable working style between husbands and wives. Women in trading families play important roles in managing finances and interacting with customers. Men used to be the primary participants in agricultural extension training and community meetings, but officials and NGOs now report greater participation of women; only when women are actively involved do livelihood habits change. Women’s Union representatives mentioned positive impacts of credit and savings programs in fostering participation, and a model of better-off women in a village cooperating to help one or more poor women out of poverty.

5.57 The shift in ethnic minority livelihood patterns captured in the process of diversification and consolidation has cultural and economic aspects. Embodied in the leap from semi subsistence to commercial agriculture, this transformation is a consequence of the marketization and commodification of upland products, land, and labor in a capitalist direction (Sikor 2011, 19). At the same time, it reflects

a conscious attempt by ethnic minority people to reimagine themselves as modern individuals, in charge of their destinies and not conforming to old stereotypes.

5.58 Ethnic minority experience in poverty reduction is not fundamentally different from that of Kinh in certain respects. Kinh have also entered into market relations and international markets, although without some of the additional barriers and obstacles facing ethnic minorities. The fact that minority group encounters with commodity markets and transnational social identities are occurring in distinct places at different times means that outcomes of their transformations will be distinct, not merely repetitions of Kinh experience. No single ethnic group (in Vietnam or elsewhere) has a monopoly on particular livelihood strategies. To suggest that minorities who engage in trading or other nonagricultural businesses are “acting like Kinh” or “following a Kinh path to development” is simply another form of ethnocentrist prejudice. Although pressures for cultural and linguistic assimilation are real, perhaps especially for some of the smallest minority groups, processes of poverty reduction and development show that some ethnic minority communities have begun to prosper without losing their identities. In fact, cohesive communities of people who are not poor have better chances of maintaining their language, religions, and other cultural traditions than those who are struggling to make a living.

5.59 This chapter has presented a mixed picture of ethnic minority development and poverty reduction. Expenditure and income gaps between Kinh and minorities continue to increase, as do gaps in important noneconomic measurements of welfare such as child nutrition. Yet, evidence also indicates that some of the “pillars of disadvantage” identified in the 2009 “Country Social Analysis” may be shrinking. Ethnic minorities have increasing access to education, credit, mobility, and markets, which may take time to translate into higher incomes. Although it is beyond the scope of this report to evaluate specific Vietnamese government and donor-funded programs, it is clear that without investments in schools, rural infrastructure, and financial services, some of these changes would not have been possible. At the same time, findings discussed in previous chapters suggest that better targeting and, more important, better coverage of poverty reduction policies and programs, would go further to reduce the Kinh/ethnic minority poverty gap. Design is important as well. Effective programs for ethnic minority poverty reduction must be targeted to address specific factors of marginality and build on positive examples of what ethnic households are already doing to improve their lives. Box 5.5 presents policy recommendations on reducing poverty among ethnic minorities.

### **Box 5.5 Emerging Policy Recommendations: Ethnic Minority Poverty**

Recent research on ethnic minority development and poverty reduction in Vietnam, including background papers for this Poverty Assessment, stresses the need for nuanced and targeted policies, programs, and projects that address specific needs of ethnic communities. Rather than a standardized national approach to poverty reduction that may have been appropriate in the past, current recommendations favor provincial or regional foci with components aimed at disadvantaged groups in the population, such as youth, migrants, older women, or members of one or more particular ethnicity. Activities should be based on evidence of success in one or more ethnic minority area.

As important as the content of these interventions is their methodology. Policies and programs should respect cultural norms while also seeking integration of ethnic minority communities with local governance and social programs. Activities should be conducted bilingually where possible and include local ethnic minorities as trainers and facilitators, as well as beneficiaries.

Among the concepts proposed for future initiatives are the following:

- *Business training for ethnic women (and men)*, such as Start and Improve Your Business training
- *Expanded vocational training for youth*, with an emphasis on skills with an identified local market in the agricultural and nonagricultural sectors
- *Provision of credit, agricultural extension training, and market information to formal and informal farmers' groups*, on a demand basis that responds to locally identified needs
- *Scaling up of mother-tongue-based bilingual education* in larger ethnic minority languages, following the pilot conducted by Ministry of Education and Training and UNICEF in Lao Cai, Gia Lai, and Tra Vinh
- *Incentives for responsible industrial development and local enterprise investment* in ethnic minority areas, providing diversified employment options without the social costs of migration
- *Recruitment and capacity development of local ethnic leadership*, in both formal governance structures such as commune and district People's Committees and traditional village leaders
- *Greater involvement of local and international NGO projects* in cooperation with government and the private sector, such as through provincial innovation funds for local social projects.

Sources: Shanks et al. 2012; Wells-Dang 2012; World Bank 2009.

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# Chapter 6

## Is Inequality Rising in Vietnam? Perceptions and Empirics

*Inequality is examined through two lenses - a qualitative study of perceptions of inequality and a quantitative analysis. The chapter documents widespread concerns across the population about rising inequality. The qualitative study draws upon rich focus group discussions that describe which inequalities are viewed as unacceptable in the eyes of Vietnamese people, and also captures less easily measured inequalities, such as inequalities in connections, voice, and influence. The quantitative analysis examines the factors driving the rise in inequality, including geographic variations in growth processes, growth in the non-agricultural sector, and disparities in education and ethnic identity. Rising inequality is linked to growth processes in the service sector and industry that have left some groups and regions behind.*

## A. Introduction

6.1 Over the last two decades, Vietnam has undergone rapid growth, substantial poverty reduction, and economic transformation. Unlike other fast-growing economies, such as China and Indonesia, past empirical work suggests that Vietnam's extraordinary economic transformation has been one of growth without an appreciable rise in inequality, a path similar to that of the Republic of Korea and Taiwan during their early stages of development (ADB 2012; Hoang et al. 2010; McCaig, Benjamin, and Brandt 2009; VASS 2011; World Bank 2009). Commonly used measures of inequality suggest that inequality rose modestly during the 1990s and stabilized during the 2000s (Hoang et al. 2010; VASS 2011).

6.2 Recent studies, including a major report on poverty prepared in 2010 by the Vietnamese Academy of Social Sciences, note that relatively modest changes in empirical measures of inequality based on household surveys stand in sharp contrast to widely shared perceptions among Vietnamese people that inequality in incomes and wealth is rising (VASS 2011). The perception of rising inequality is also notable in the press, among policy makers, and among academics in Vietnam.

6.3 This chapter examines inequality through two lenses: a qualitative study of "perceptions of inequality," and a quantitative analysis that builds on lessons from the qualitative assessment.<sup>35</sup> Examining inequality using both quantitative and qualitative tools gives a richer picture of the inequalities in outcomes, opportunities, and social and political capital among Vietnamese people. Inequality in outcomes refers to inequalities in income, consumption, and wealth, while inequality in opportunities refers to differences in human capital driven by circumstances such as gender, ethnicity, location, or parental characteristics. Inequality in social and political capital refers to differences among individuals measured in terms of connections, voice, and influence.

6.4 The perceptions study helps to identify which types of inequalities are tolerated and which are viewed as unacceptable in the eyes of Vietnamese people, and also captures inequalities that are difficult to measure in quantitative analysis, such as inequalities in connections, voice, and influence. The quantitative assessment focuses on measuring changes in the distribution of outcomes and opportunities over time, and on understanding the drivers of these changes using data from household surveys, including the various rounds of the Vietnam Household Living Standards Survey (VHLSS).

6.5 The perceptions study suggests that Vietnamese people from all backgrounds—rural and urban, rich and poor—think that inequality has risen substantially over the last five years. Focus group participants rarely discussed income or expenditure inequality in isolation, but instead linked it to determinants—notably inequalities in education, access to good employment opportunities, inequalities in access to land, and in connections, power, and influence. As such, inequality in access to employment is often explained as a consequence of inequality in access to education, and inequality in employment is then linked to inequalities in income, expenditures, and wealth. Inequalities in power and connections are perceived as increasingly important in determining access to jobs (transforming education into employment) or maintaining land rights. Despite perceived rising inequalities in income and wealth, the majority of respondents consider inequality in outcomes acceptable as long as it is generated through fair and legitimate means. The tolerance for income inequality demonstrated by respondents in the perceptions study is a major shift in public attitudes toward inequality compared to Vietnam's pre-reform period.

6.6 Empirical evidence on inequality from the 2010 round of the VHLSS suggests a modest rise in income inequality, driven primarily by growth in rural areas, where income from higher-value sideline

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<sup>35</sup> The perceptions study was led by a team from the Vietnamese Academy of Social Sciences and Ageless Consulting.

activities and nonagricultural income sources has been rising among better-off households. The rise in income inequality is partly a reflection of growth processes that have altered the relative return to assets such as education and productive capital in the economy. As such, the empirical analysis suggests that growth has interacted with existing inequalities in opportunities—inequalities in education, patterns of social exclusion between ethnic minorities and the majority, access to good jobs, geographic disparities—to increase income inequality and income gaps between rich and poor households.

## **B. A Step Back: Why are we Concerned about Inequality?**

6.7 Should policy makers be concerned about rising inequality in income or expenditures? Whether inequality in outcomes is likely to be a concern depends, in part, on the drivers and processes that generate the inequality. It is useful to distinguish between “good” and “bad” processes and the subsequent inequality created. “Good” processes and inequalities are those that reward effort and hard work, that reflect incentives to innovate, that stimulate entrepreneurship, and that provide the impetus for economic growth.<sup>36</sup> “Bad” processes and inequalities can be considered to be those that prevent certain segments of the population from benefiting from growth processes and from transitioning out of poverty and low-income-generating activities.<sup>37</sup> These inequalities often reflect unequal opportunities for children born into certain circumstance, such as ethnicity, location, the income or education level of the parents, or gender (Roemer 2011). They also reflect inequities in connections, voice, and influence, where people from different backgrounds face different chances of getting into a good university, acquiring a well-paying job, or of converting land because of their backgrounds and circumstances. It is these second drivers of inequality—linked to inequalities in opportunity and unequal process—that are most likely to be damaging for growth, social inclusion, and societal tolerance for inequality in income and wealth (World Bank 2006).

6.8 The evidence suggests that the rise in income inequality seen in Vietnam since the mid-2000s is the result of both “good” and “bad” processes. While a substantial fraction of the population has contributed to the growth processes and has benefited from growth, inequalities in opportunities continue to repeat themselves across generations, and there is an increasing sense of unfairness in processes such as access to public services, how jobs are acquired in the public sector, and how land conversions occur.

6.9 The perceptions study provides us with a unique depiction of “good” and “bad” types of inequality as seen through the eyes of Vietnamese people from a variety of backgrounds, including young and old, rural migrants and long-term urban residents, workers in the informal sector and the higher paid, formal sector employees, and minority populations and poorer individuals more generally, particularly living in rural areas. In the perceptions study, focus group participants were asked to categorize which forms of inequality were seen as more or less acceptable, and to explain their views.

6.10 Rising income inequality was largely viewed as acceptable among study respondents if rising disparities in incomes are associated with market-orientated growth-generating processes that reward education, skills, hard work, and talent. The acceptability of inequality of incomes generated

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36 We may also be concerned about rising inequality if there is a causal relationship between inequality and growth. While there are many theoretical models that postulate a negative (and positive) relationship between inequality and growth, a comprehensive assessment of the empirical literature suggests that the empirical evidence is inconclusive (Banerjee and Duflo 2003; Bourguignon 2004; World Bank 2006).

37 These inequalities are linked to “pockets of poverty” whereby certain groups in the population continue to remain in poverty and poverty continues to perpetuate across generations, despite high average growth rates in the economy (VASS 2008).

through legitimate means across all demographic and socioeconomic groups was considered by the research team as a major shift in public attitudes with respect to inequality, away from the previous focus on egalitarianism toward market-based mechanisms and incentives. As explained by two interviewees,

*“Disparity and competition is natural in a market-orientated economy. If you are talented, you can be rich.” (group of elder persons, Me Tri commune, Hanoi)*

*“Those who have talent and luck are conditioned to succeed. Those who have none just suffer. I heard no complaint about inequalities. Such is reasonable.” (village officials group, Cam Hung commune, Hai Duong)*

6.11 The empirical evidence also suggests that inequalities generated due to reforms and structural transformation partly reflect “good” processes that are associated with economic momentum and enhanced economic incentives. Since the *Doi Moi* reforms began in 1986, Vietnam has witnessed a rapid economic transformation that has harnessed the power of market incentives to foster rapid economic growth alongside strong poverty reduction. The rise in income inequality partly reflects the process of structural transformation that has occurred since the reforms, which have shifted labor away from agriculture and into the manufacturing and service sectors where value added per worker is higher.<sup>38,39</sup> The inequalities generated through these growth processes can be considered inevitable in the sense that they are associated with a positive momentum in the economy and are likely to encourage growth.

6.12 However, not all of the forces driving income inequality are perceived as “fair,” and inequalities in connections, voice, and influence are perceived by some to be rising. Whether inequality in outcomes is viewed as acceptable or not appears to depend more on the process by which the inequality is generated than on the level of disparity. Inequality in outcomes were widely accepted by study participants, if the income or expenditure was generated through processes or sources that were considered to be fair, while inequalities generated through illegitimate practices were seen as unacceptable. For example, inequalities arising from differences in education, capital, hard work, honest business practices, and luck were seen as acceptable in many focus groups, while those generated through the illegitimate use of power or influence were unacceptable. As explained,

*“There are types of illegitimate richness, and we do not accept these types, we see them as being an injustice. For example, some traders sell seedlings to us at extremely high prices. And corruption happens at all levels.” (youth group, Chieng Khoa commune, Son La)*

*“Without [unfair] power and connections the directors just differ from the workers by some coefficient of basic salary. Because they have power and information, holding important positions, doing businesses, they have used this to become much richer.” (long-term migrant group, An Son ward, Tam Ky city, Quang Nam)*

6.13 Inequalities in opportunities imply that current differences in incomes will be perpetuated in future generations unless the intergenerational links are broken. Therefore, the inequalities currently seen in labor markets are likely to replicate themselves in the children of those who are unable to take advantage of growth processes, and may result in groups that are already disproportionately

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38 Vietnamese poverty reduction in the 1990s and early 2000s was driven in part by strong growth in the agricultural sector, linked to the opening of agricultural markets from 1993 onward. The equitable distribution of land across the population meant that this period of growth was broad based, and one that was accompanied by a substantial rise in income in poor rural areas (Benjamin and Brandt 2002; Ravallion and van de Walle 2008).

39 In 2010, value added per worker in the manufacturing and service sectors was five times higher than in agriculture (World Bank calculations based on data from General Statistics Office statistical yearbooks).

poor falling even further behind. Although inequalities in educational attainment have narrowed in recent years, particularly at the primary level, the educational attainment of children from poor rural households remains low, particularly in some regions of the country (Chapter 3) and the characteristics of the family a child is born into continue to be a strong predictor of whether a child acquires secondary education and beyond. Therefore, the inequalities currently seen in income and wealth are likely to replicate themselves in the children of those who are unable to take advantage of growth processes, resulting in the intergenerational transmission of poverty and well-being.

### C. Is Inequality of Outcomes Rising in Vietnam?

6.14 Past empirical work suggests that the fast growth seen in Vietnam over the last two decades has not been accompanied by an appreciable rise in inequality. The Gini Coefficient of income inequality remained fairly stable in the early 2000s (McCaig et al. 2009), and expenditure inequality showed no appreciable rise on a national level (VASS 2011). According to a 2010 study led by a team from the Vietnamese Academy of Social Sciences, the Gini Coefficient of expenditure inequality increased from 0.33 to 0.35 between 1993 and 2002, but remained fairly stable between 2002 and 2008 (Hoang et al. 2010).

6.15 Empirical work done for this study suggests that income inequality has risen modestly since 2004, while inequality in expenditures remained stable between 2004 and 2010, according to several commonly used measures of inequality. Findings from the perceptions study are, however, somewhat at odds with the empirical picture of inequality emerging from the 2010 VHLSS. The perceptions study finds that inequality in outcomes is widely perceived to have risen over the last five years and to have risen in both urban and rural areas. This section looks briefly at the source of some of these discrepancies.

6.16 Focus group respondents in both urban and rural areas reported that they perceived inequality in outcomes—typically defined using incomes, but also including spending on consumer durables and assets—to have risen, and to have risen significantly in urban areas since 2005.

6.17 Perceptions of inequality were often but not always rooted in direct life experiences, and varied across groups according to socioeconomic characteristics. Individuals tended to first compare themselves within their communities and then go one step further to compare themselves with slightly better-off individuals or places. For example, low-skilled workers in Hai Duong and Ho Chi Minh City compared themselves to higher-skilled workers, and individuals living in peri-urban areas in Hai Duong, Hanoi, and Da Nang compared themselves with people living in inner-city areas. Those living in urban environments tended to have broader frames of reference, and in these areas disparities relating to conspicuous consumption (automobiles, high-end cell phones, large houses) were noted, in particular.

6.18 Some focus groups in more remote and difficult rural areas were less comfortable discussing inequality of outcomes within their own communities than inequality within society, potentially due to unease in singling out differences in closely knit communities with common disadvantages in location, agricultural livelihoods, social and political capital, and other ethnic specifications. Participants of these focus groups appeared to be more at ease, however, when discussing inequalities beyond their communities, and in particular inequalities in connections, voice, and influence.

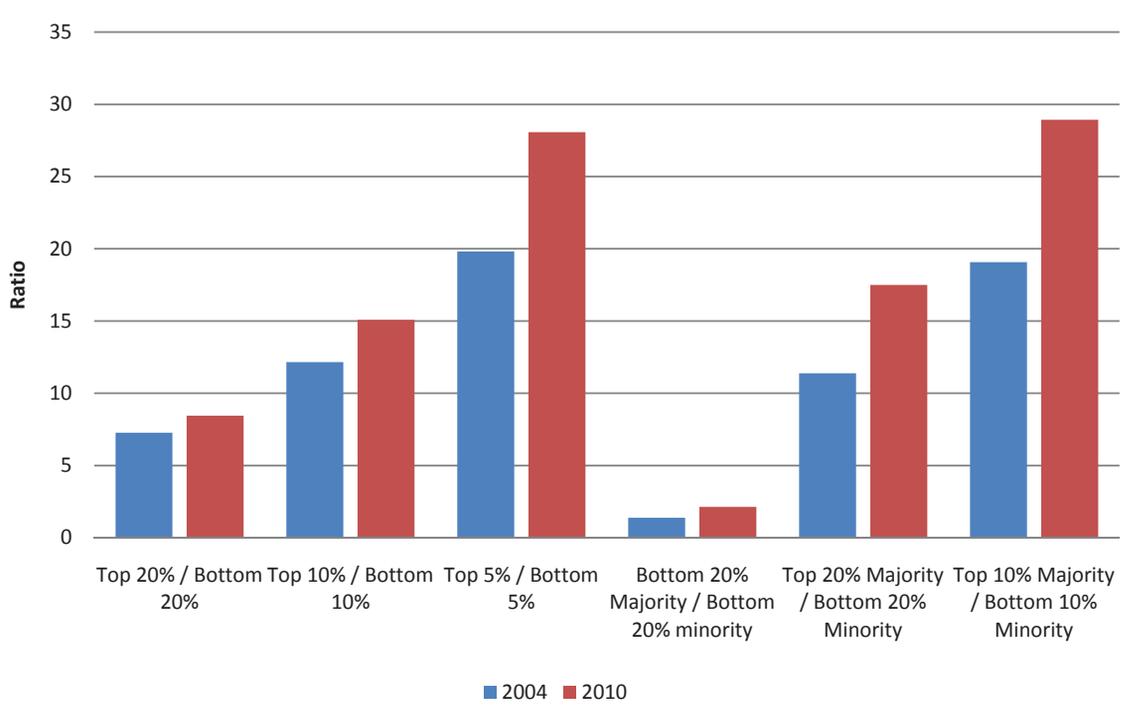
6.19 Focus groups consisting of less educated individuals from poorer households saw disparities related to substantially wealthier groups as being less important for their lives and showed limited interest in comparing their situation with others in more favorable circumstances. For example, one member of the migrant group in Da Nang city stated that,

*“I feel it okay. I do not spend much and my earning is sufficient for my living. My life might not be as good as theirs, but I spend to my liking and do not want to compare myself with others.”*

6.20 The empirical evidence suggests that income inequality has been rising at a national level in Vietnam, albeit modestly. Figure 6.1 shows the ratio of mean per-capita incomes of the top and bottom quintile, decile, and vigtile of the income distribution. Although all groups saw substantial growth between 2004 and 2010, the unevenness of growth implies that the ratio of mean per-capita income of the top 20 percent relative to the bottom 20 percent (referred to recently by General Statistics Office as the “rich/poor gap”) has increased from just over 7 to 8.5. Similar tendencies are seen across other income quintiles, and the increase in disparities grows as one narrows in on the very poorest and very richest households.

6.21 It is clear that ethnic minorities are becoming increasingly left behind in these growth processes. The last three columns of figure 6.1 show that average incomes and growth among the bottom 20 percent and 10 percent of the ethnic minority distribution have been lower than that among the majority population. Comparing average incomes among those in the bottom 20 percent of households in the ethnic minority population with those in the top 20 percent of the majority population, we see that the top 20 percent of majorities earned 11.4 times what was earned by the bottom 20 percent of minorities in 2004, and 17.5 times what was earned in 2010. In comparison, when we look at the entire population, the ratio of incomes among the top to bottom 20 percent rises from 7.2 in 2004 to 8.4 in 2010. This suggests that ethnic minorities are increasingly overrepresented among the poor, as has been discussed earlier. The gaps between minorities and the rest of the population are rising. The ratio of incomes earned by the bottom 20 percent of minorities relative to the bottom 20 percent of majorities has also increased, from 1.4 to 2.1. This may reflect, in part, the predominance of agriculture as a major source of income among minorities and poorer households (see Chapter 5).

**Figure 6.1 Ratio of Mean Per-capita Income by Percentile, 2004-2010**

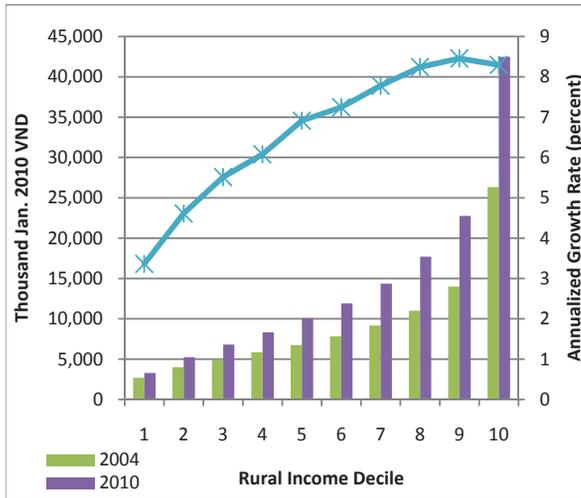


Source: 2004, 2010 VHLSS.

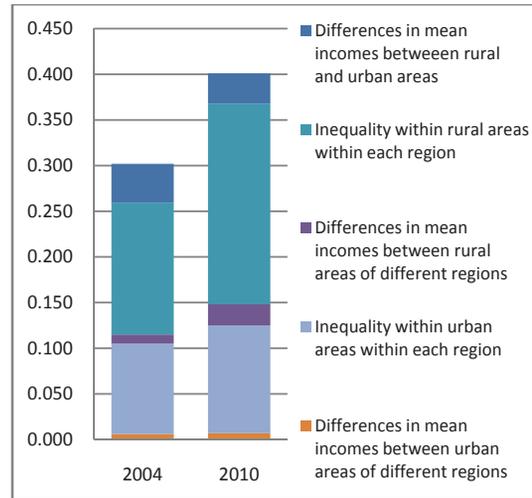
6.22 The rural sector has been the driving force behind the recent rise in income inequality. Figure 6.2 shows the growth incidence curves for income by per-capita income decile in rural areas. Growth in rural areas has been far higher among richer households than among poorer households; growth in the poorest 10 percent of households was less than half that seen in the richest 10 percent of households, and the ratio of income consumed by the top income decile to that consumed by the bottom income decile increased by 25 percent between 2004 and 2010. For the first time since

VHLSS data started being collected, the Gini Coefficient of income inequality is now of a similar magnitude in urban and rural areas. The Gini Coefficient of income inequality in rural areas rose from 0.365 in 2004 to 0.413 in 2010, while in urban areas the Gini remained stable over the same period, at approximately 0.381.<sup>40</sup>

**Figure 6.2 Mean Per-capita Rural Income per Year by Rural Income Decile, 2004-10**



**Figure 6.3 Theil Decomposition of the Level and Changes in Income Inequality, 2004 to 2010**



Source: 2004, 2010 VHLSS.

6.23 The contribution of differences in mean incomes between rural and urban areas and between provinces to explaining overall inequality has declined over time. The Theil index of inequality can be decomposed into five components: (a) differences in mean incomes between rural and urban areas nationally, (b) differences in mean incomes between rural areas of different provinces, (c) inequality within rural areas within each province, (d) differences in mean incomes between urban areas of different provinces, and (e) inequality within urban areas within each province.<sup>41</sup>

6.24 Figure 6.3 shows the fraction of income inequality attributable to these various components in 2004 and 2010. Between 2004 and 2010, the fraction of income and expenditure inequality attributable to differences in income between rural and urban areas declined. This is a reflection of the faster average rate of growth in rural areas, with the result that mean incomes and expenditures in rural areas have been catching up with those in urban areas. The ratio of income in urban areas to income in rural areas declined from 1.87 in 2004 to 1.70 in 2010.<sup>42</sup> Similar patterns were seen in consumption; the ratio of mean consumption in urban areas to rural areas declined from 2.26 in 2004 to 2.01 in 2010. This appears to be driven by the top end of the rural income distribution; households in the top 40 percent of incomes in rural areas have seen faster growth than households in the top 40 percent of incomes in urban areas, while the bottom 20 percent of rural households have seen slower growth than their urban counterparts. The decline in rural-urban welfare differences over time

40 Trimming for measurement error and removing the bottom and top 1 percent of the income distribution reduces the magnitude of the Gini Coefficients, but the trends over time remain the same; the Gini Coefficient of inequality in urban areas remains fairly stable, while the Gini Coefficient of inequality in rural areas rises above the urban Gini.

41 Since the fraction of the population in urban and rural areas, and by region, is changing over time, changes in the between component of inequality may also be attributable to changes in the relative share of the population living in urban areas.

42 These figures reflect spatially deflated income and consumption aggregates. The patterns for nonspatially adjusted figures reflect a similar decline, from a ratio of 2.15 to 1.98 for income and from 2.72 to 2.57 for consumption. The higher nonspatially adjusted ratio reflects price differences between urban and rural areas.

in Vietnam is in contrast to the development patterns of China, where a rapid expansion of the rural-urban gap has been an important source and driver of inequality (World Bank 2009).<sup>43,44</sup>

6.25 Despite rising income inequality, inequality in consumption at a national level has not been increasing. The difference between income and consumption inequality patterns warrants further analysis. Income is a flow measure while consumption (as defined for this report) has been smoothed over time; for example, it also includes imputations for housing and durables. In addition, the way that consumption was measured changed in 2010, which has raised issues of comparability with earlier rounds. Therefore, income was deemed a more suitable candidate for over-time comparisons of inequality.

6.26 Perceptions of inequality as captured in the qualitative study appear to capture different concepts than are reflected in empirical measures of inequality, and as such provide a different albeit complementary facet of inequality. For example, the perception of rising inequality in urban and rural areas is at odds with the empirical evidence, which suggests that the rise in income inequality at the national level is driven mostly by rising inequality in rural areas. Furthermore, at the national level inequality in expenditures appears to have remained stable in the 2000s, in contrast to perceptions that it has been rising. The annex to this chapter discusses how to reconcile differences between empirical measures of inequality and perceptions of inequality.

#### **D. Why has Income Inequality Increased in Vietnam?**

6.27 Disparities in incomes across Vietnam and the rise in income inequality can be attributed to multiple and interrelated factors.<sup>45</sup> First, and as discussed elsewhere in this report, ethnic minority groups have progressed less rapidly than the Kinh majority. Second, and closely related, geographic variations in growth patterns are likely to contribute to the rise in inequality; that is, differences in drivers of agricultural and nonagricultural growth across regions contribute to differences in growth rates. Third, the rise in income inequality reflects changes in the pattern of production away from agriculture into the nonagricultural sector, and from low-skill to higher-skill work outside the agriculture sector. The changes in production vary in their scope across region and interact with existing disparities in human and physical capital to change the distribution of incomes in Vietnam over time. Finally, the misuse of power, corruption, and connections are also likely to be linked to inequality, although it is not clear to what degree these factors have contributed to the rise in income inequality.

6.28 The first three explanations for rising income inequality are examined in this section; inequality in power, corruption, and connections are discussed in the next section. Other factors such as changes in land-holding patterns and regional variation in agricultural productivity are also likely to play an important role, and are left for future exploration.

6.29 The rise in income inequality reflects the increasing economic polarization of many ethnic minority groups. The evidence suggests that differences in growth rates between ethnic minorities

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43 The rural-urban income gap and trends in the gap vary substantially between provinces, and more recent analyses of the gap find that it has declined, in part due to rural-to-urban migration.

44 Between-group inequality consists of three factors: differences between groups in mean incomes, the number of groups, and their relative sizes. Therefore, changes in the underlying population structure can cause difficulties with comparisons of decompositions over time. We therefore compare the standard measures of between inequality to the maximum possible between inequality for groups of the same size and number using the method of Elbers et al. (2008). We find that the conventional measure of inequality between regions accounts for a declining share of maximum between inequality between 2004 and 2010. However, although declining, inequality attributable to differences between rural and urban areas, and between regions, continues to be an important characteristic correlated with inequality.

45 The factors discussed most detail in the text are those that were considered to be key factors related to rising inequality, as identified through empirical analysis and also emerging from the qualitative study.

and the majority have particularly contributed to rising inequality within rural areas. Since ethnic minorities have lower education outcomes and lower access to productive capital, differences in these other assets contribute to and substantially reinforce differences in incomes across ethnicities. As the non-agricultural sector has grown in Vietnam and more educated individuals have been able to profit from this growth, the predominance of minorities in the slower growing agricultural sector has resulted in a widening gap, on average, between minorities and the Kinh majority.

6.30 Figures 6.4 and 6.5 show growth by income source among ethnic minorities and the majority, by quintile, between 2004 and 2010. The majority of income growth among poorer ethnic minority households has come from agriculture and side-line activities. Incomes among all minority quintiles apart from the richest are growing at a slower rate than those of the majority, and even the fastest-growing minority households experience lower income growth than the average majority households. The divergence in growth rates is strongly related to the income-generating activities of households. The fraction of income and growth from wage income and nonagricultural sources rises as one moves up the income quintiles. Only the richest 20 percent of minority households experience substantial growth in incomes arising nonagricultural business activities.

6.31 The fraction of inequality attributable to differences in mean incomes between the majority and minority has risen over time, from 9 percent of total inequality to 14 percent, and approximately one-quarter of the rise in income inequality over time in rural areas can be attributed to differences between the majority and ethnic minorities. Therefore, differences in growth rates between minorities and the majority have contributed to the rise in inequality over time, particularly in rural areas where ethnic minorities are concentrated.

6.32 Alongside an increase in mean income differences between minorities and the majority, the uneven patterns of growth across income quintiles suggests that inequality has risen within the majority group and within minority groups. The income data suggest that incomes among the poorest 20 percent of minorities grew at an average annual rate of only 2 percent, substantially slower than the growth rate for the wealthiest 20 percent of minorities.

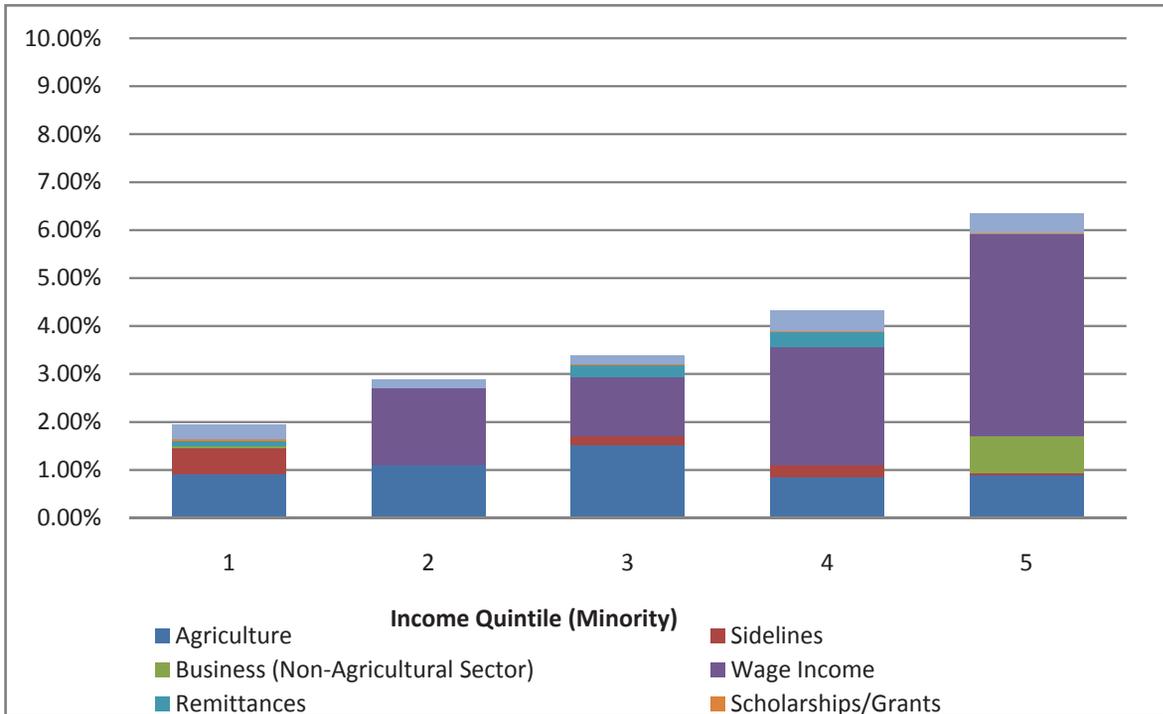
6.33 The percentage rise in the Gini Coefficient of income inequality among the Kinh majority (in urban and rural areas) is greater than that seen in the combined sample, suggesting that the overall rise in income inequality is additionally driven by other factors.

6.34 The evidence from the VHLSS of growing disparities between ethnic minorities and the majority population is corroborated in a study tracking rural households over time using the Vietnam Access to Resources Household Survey (McKay and Tarp 2011). This study finds that incomes for ethnic minorities grew more slowly, on average, between 2006 and 2010 than the rest of the rural population, and this was the case even among minority and majority households with similar observable productive assets and education. Interestingly, the study documents substantially higher growth rates for ethnic minority households with high levels of education compared to other minority households.

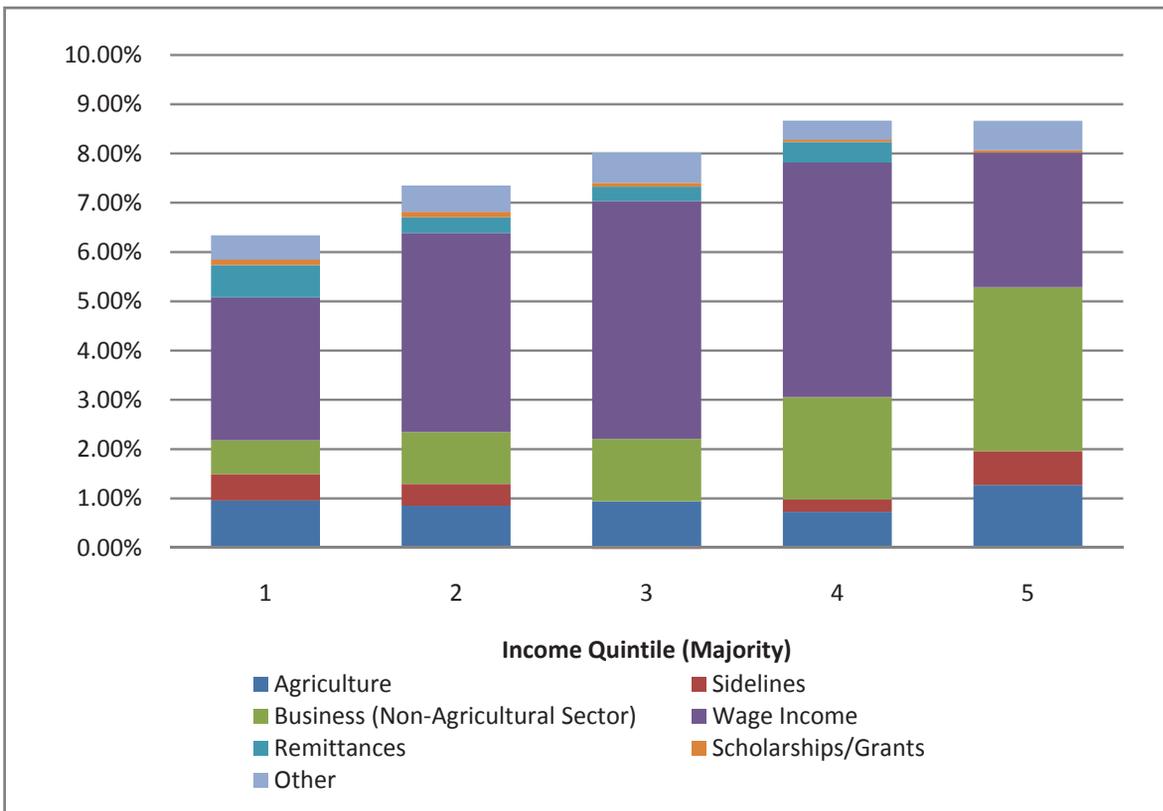
6.35 A second explanation for rising inequality is geographic variation in growth patterns that might have caused an increase in inequality between regions, provinces, and districts (see Chapter 4 for a detailed discussion of regional variation in growth). Regional variation in growth patterns does, however, prompt the question: Why are certain regions growing faster than others, and what is driving these differences in growth?

6.36 The evidence suggests that regional variation in growth patterns contributes to the explanation of the rise in inequality, but appears to play a more limited role than differences across households within regions. There is substantial evidence of variation in growth across regions, with some poorer regions such as the North East, North Central Coast, and North West growing substantially more slowly than the Red River Delta and the Central Highlands. Figure 6.6 shows mean incomes and growth between 2004 and 2010 by region. Growth has been uneven across regions; income growth

**Figure 6.4 Growth by Income Source, 2004-2010, Ethnic Minorities**



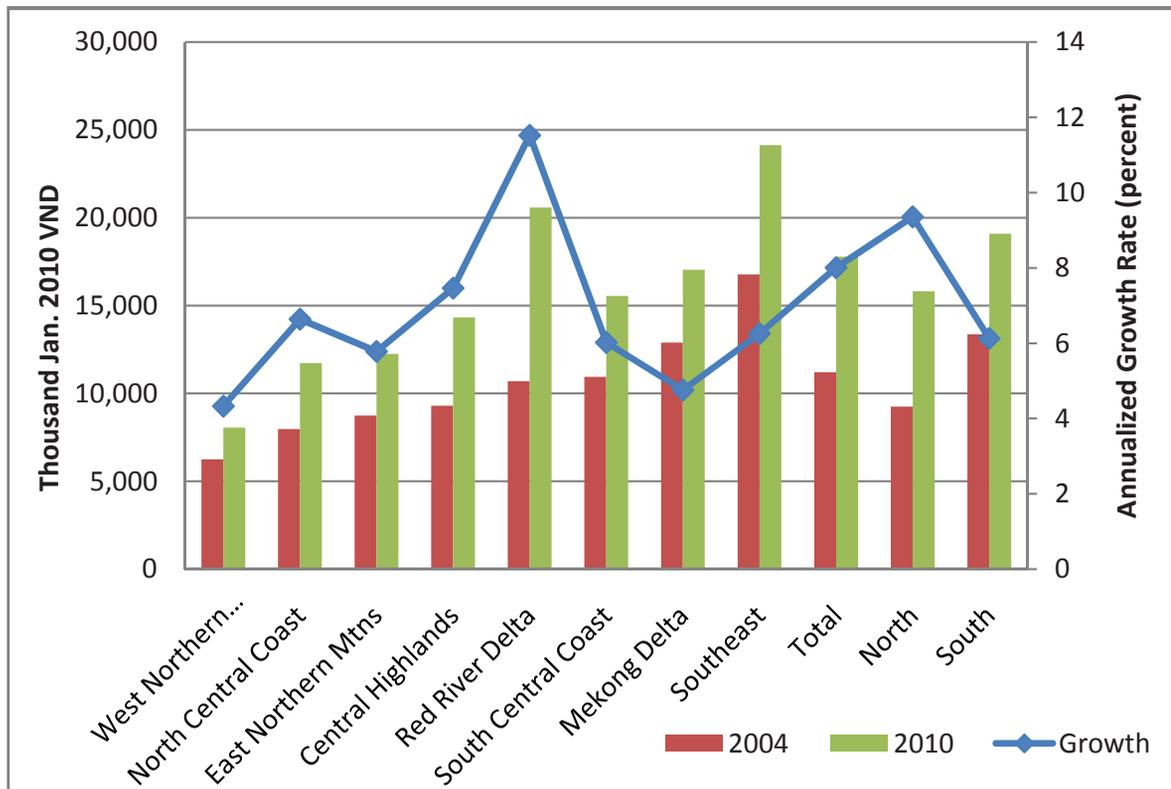
**Figure 6.5 Growth by Income Source, 2004-2010, Ethnic Majority**



Source: 2004, 2010 VHLSS.

in the North East has been lower than in other parts of the country, while income growth in the Red River Delta and in the Central Highlands has been substantially greater than average growth rates of 8 percent. The South East region remains the region with the higher income per capita. These growth patterns differ somewhat from patterns in the 1990s; between 1993 and 1998, the Northern Uplands and Central Highlands experienced the lowest rates of growth, while the South East experienced the highest rates of growth (World Bank 2000).

**Figure 6.6 Mean Annual Per-capita Rural Income per Year by Region, 2004-2010**



Source: 2004, 2010 VHLSS.

6.37 The fraction of income variation attributable to differences across regions and provinces has risen over time in rural areas, in part due to uneven growth in agriculture and in part due to geographic variation in opportunities in the nonagricultural sector. In contrast, China saw a reduction in the variation in incomes attributable to location over the 1990s and early 2000s (Benjamin et al. 2004; Benjamin et al. 2007). An important caveat is that migration and remittances are likely to play a mediating role in reducing variation in incomes and growth across regions, and the extent of this role is not fully captured in the data.<sup>46</sup> This is an area that deserves further attention in future analysis of inequality.

6.38 Uneven growth across regions and provinces in Vietnam has contributed to rising inequality, although the majority of the rise in income inequality is attributable to rising inequality within regions rather than rising inequality between regions. Approximately 8 to 10 percent of the rise in the Theil

<sup>46</sup> Four percent of rural households declare having a household member who has stayed away from home for more than six months over the last 12 months. This number appears low relative to evidence from the census (GSO 2009) and misses shorter-term, longer-term, and household migration patterns.

index can be attributable to an increase in inequality between regions, with the remainder due to inequality within regions. These trends are in marked contrast to patterns seen in Vietnam in the 1990s. Between 1993 and 1998, 83 percent of the increases in inequality was attributed to an increase in inequality between regions (World Bank 2000).

6.39 Differences in incomes and expenditures are increasingly related to differences in household characteristics rather than to where households live, although location continues to be an important correlate of household welfare. Education appears to be one of the most important characteristics for explaining differences in income and expenditure across households in 2010. Controlling for the average education of working-age adults explains more of the variation in household incomes in rural areas than taking into account the region of residence. The fraction of variation in income explained by education increased between 2004 and 2010, suggesting that education is becoming an increasingly important correlate of income. The amount of variation in household income attributable to differences between regions of residence has also increased over time, although it has done so from a lower base. Of the total increase in the Theil-L between 2004 and 2010, 65 percent of the increase can be attributed to an increase in inequality between household education levels, where household education is defined using the education of the household head.

6.40 The third explanation for rising inequality relates to shifts in the pattern of production away from agriculture into the nonagricultural sector. Nonagricultural opportunities and employment were strongly identified in the perceptions study as contributory factors to the rise in inequality. Factors discussed included a move away from agricultural production toward greater nonagricultural wage and business opportunities, rising returns to education, disparities in education across households, and differences in initial capital endowments. In urban areas, discussions centered around access to good employment opportunities and land conversion, while in rural areas higher value-added agricultural and sideline activities and access to nonagricultural employment opportunities are cited as prime candidates for rising inequalities. Respondents noted increasing difficulties in access to good jobs, particularly with respect to public sector employment.

6.41 The composition of household income and employment has moved away from agriculture toward manufacturing and services. Figure 6.7 shows the share of workers in the primary, secondary, and tertiary sector and indicates the fraction of workers in each sector in rural and urban areas. Between 1998 and 2010, the share of the working population employed in agriculture declined from 68 percent to 45 percent while the share employed in manufacturing increased from 12 to 24 percent and that in services increased from 20 to 31 percent. In both rural and urban areas, wage incomes have seen fast and above-average growth over the period, while incomes from agricultural and allied activities have grown relatively slowly. Although agricultural and allied activities continue to be an important source of income for rural households, their contribution has declined from an estimated 55 percent of rural income in 1998 (McCaig et al. 2009) to only 35 percent of rural income in 2010.

6.42 There is substantial regional variation in both the speed at which economic activity has moved away from agriculture in rural areas, and in the intensity with which nonagricultural activities are conducted at a household level. In rural areas, diversification into nonagricultural employment has occurred at both the household and individual level, and it has been a powerful force for poverty reduction over the past decade. Variation in the speed at which this is occurring is likely to be related to variation in living standards and in growth rates across regions.

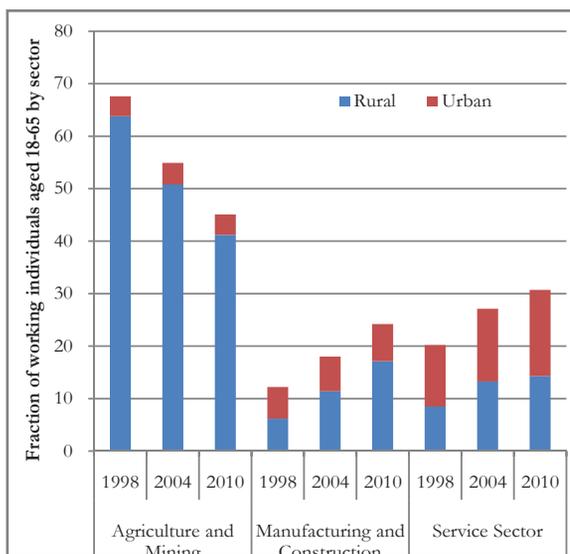
6.43 The expansion of nonagricultural wage and salaried work in urban and rural areas continues a trend seen in the 1990s. In rural areas in 1998, wages and salaried work contributed only 14 percent of total income overall (McCaig et al. 2009). Wages have become a more significant source of income throughout the 2000s; by 2010, wages accounted for 32 percent and 52 percent of income

in rural and urban areas, up from 26 percent and 44 percent, respectively in 2004.<sup>47</sup> Although 19 percent of individuals receiving wages in rural areas in 2010 worked for wages in the agricultural sector, the vast majority of rural wage work is outside of agriculture.<sup>48</sup>

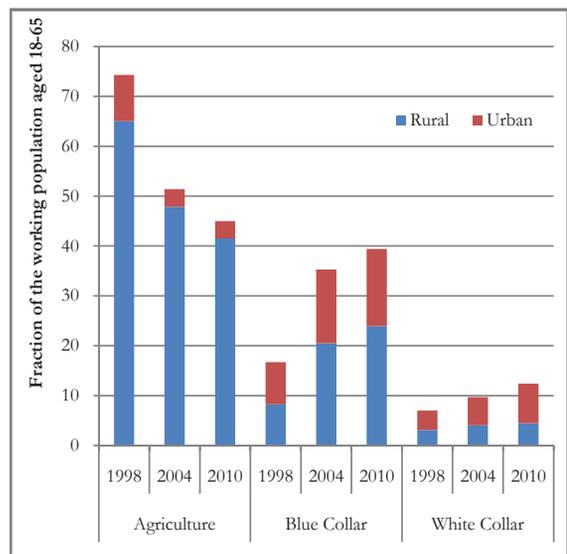
6.44 Employment patterns in the nonagricultural sector are very different in rural and urban areas. In rural areas, the move out of agriculture has been accompanied by a sharp rise in employment in manufacturing and construction. In 2010, nearly 70 percent of individuals in the secondary sector were found in rural areas, and this sector accounted for nearly 20 percent of overall employment in these areas. By contrast, urban areas have seen a decline in the fraction of individuals employed in the manufacturing sector and a corresponding expansion in services.

6.45 Occupations in the nonagricultural sector differ in their demand for skill, and the composition of nonagricultural growth by occupation type has differed across rural and urban areas. Figure 6.8 shows the split of workers between agriculture and lower- and higher-skilled nonagricultural work (blue- and white-collar work) in rural and urban areas. Although the fraction of workers conducting high-skilled (white-collar) work has risen over time, the majority of the increase has been seen in urban areas.<sup>49</sup> By contrast, rural areas have seen growth in lower skilled, blue-collar nonagricultural employment, which partly reflects a substantial increase in manufacturing work in rural areas over time.

**Figure 6.7 Sector of Employment for Working-age Individuals in 1998, 2004 and 2010**



**Figure 6.8 Type of occupation for working-age individuals in 1998, 2004 and 2010**



Source: 1998 VLSS, 2004 VHLSS, 2010 VHLSS.

Note: Classifications are based on occupation codes. Agriculture includes high and low-skilled agricultural work. Non-agricultural occupations are separated into lower and higher-skilled work: higher-skilled work consists of all professional and office based categories, lower-skilled work includes machine operators, service and sales and unskilled work. The blunt classification is due to changes in occupation codes over time.

47 Wages are likely to include income remitted from members of the household who work in another region. Since many migrants go from rural to urban areas, the fraction of rural incomes coming from wages is likely to overstate the amount of wage work actually being conducted in rural areas.

48 There is substantial regional variation in the prevalence of agricultural wage work in rural areas. In the North, only 8 percent of individuals working for wages in rural areas are found in the agricultural sector. In the South, nearly 29 percent of wage workers in rural areas can be found in agriculture.

49 High-skilled work has become disproportionately urbanized over time. In 1998, 56 percent of professional jobs was found in urban areas compared to approximately 20 percent of the population; by 2010, 64 percent of professional jobs and 30 percent of the population were in urban areas.

6.46 The pattern of nonagricultural growth—greater manufacturing and blue-collar employment growth in rural areas and greater service sector and white-collar employment growth in urban areas—is perceived as a source of disparity among focus group respondents in rural areas and in small urban towns. For example, in rural areas with industrial parks, such as Hai Duong, factory employment is the primary source of labor demand in the nonagricultural sector. While it is possible to find low-skilled and relatively low-paid work in a factory, it is perceived that there are far fewer higher-skilled and higher-paid employment opportunities than in big cities such as Hanoi.

6.47 Figures 6.9 and 6.10 show the composition of income and growth across income quintiles in urban and rural areas, respectively. The share of income from agriculture and allied activities has declined over time but continues to be the major source of income for the poorest 40 percent of the rural population. The share of income coming from sideline activities related to agriculture has remained substantial among poorer households and has grown as a share of income for the poorest quintiles since 1993 (McCaig et al. 2009). The majority of income from this component across all income quintiles comes from livestock farming and aquaculture.

6.48 The rising share of wage incomes across the income distribution can be readily seen in the figures. In urban areas, wages are the most important source of income across all income groups and account for over half of incomes. This is in stark contrast to the income profile in 1993, when the majority of incomes from the top half of the income distribution came from business income.<sup>50</sup> In rural areas, all groups earned a greater share of income from agriculture and sideline activities than from wages in 1993 and 2004. By 2010, wage incomes had overtaken agricultural incomes for the third and fourth quintiles. Although the share of wages increased for the richest quintile, they continue to earn more from business and agriculture. The fraction of working individuals receiving wages as either their primary or secondary employment has also risen over time, from approximately 17 percent of the workforce aged 18 to 65 in 1998 to 40 percent in 2010, and from 13 percent to 37 percent of the workforce in rural areas.<sup>51</sup>

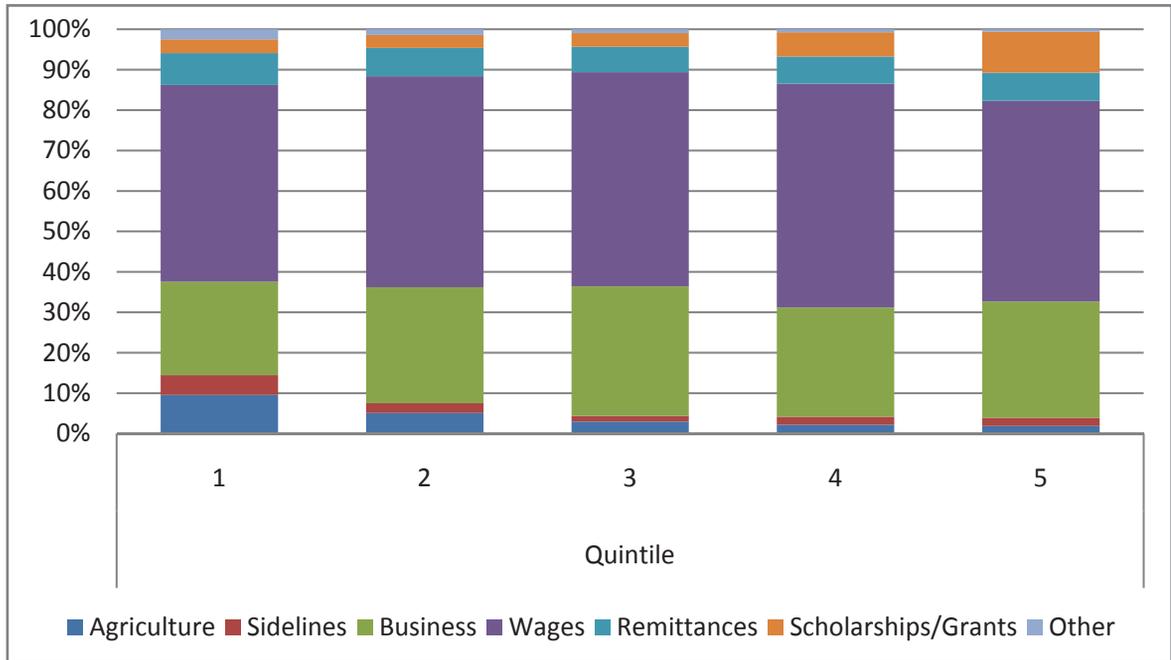
6.49 To more formally explore the contribution of different income sources to income inequality, we decompose the Gini Coefficient into its source components (Adams 1999; Stark et al. 1986). The Gini Coefficient of total income can be written as the sum of the contributions of each income source. The effect of a source on total income can then be broken down into three components: (a) the share of income component in total income; (b) the inequality within the sample of income from a given source; and (c) the correlation between a given source of income and total income. The larger the product of these three components, the greater the contribution of income from the source to overall income inequality.

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50 The income structure of the richest quintile of the urban population has converged on the structure of the poorer groups over time. In 1993 and 2004, the income composition of the top 20 percent appeared to be quite different from the rest of the population; business incomes were a much larger share of income for the top quintile, and they had the smallest share of income from wage sources. By 2010, the top quintile looked more similar to the other groups; their share of wage income rose to 49 percent of income in 2010, from 38 percent, while the share of income from business sources declined from 37 percent to 28 percent. These trends continue patterns seen in the 1990s; in 1993, the upper quartile of the income distribution earned nearly 60 percent of their income from a housbusiness compared to 10 percent from wages sources (McCaig et al. 2009).

51 Note that labor market participation has also changed over this period. In 1998, 90 percent of individuals between 18 and 65 reported working compared to 84 percent in 2010, while the fraction of the population that is of working age has risen over time, from 54 percent to 64 percent between 1998 and 2010 (calculated from the 1998 and 2010 VHLSS).

**Figure 6.9 Composition of Income in Urban Areas, 2010**



Source: 2010 VHLSS.

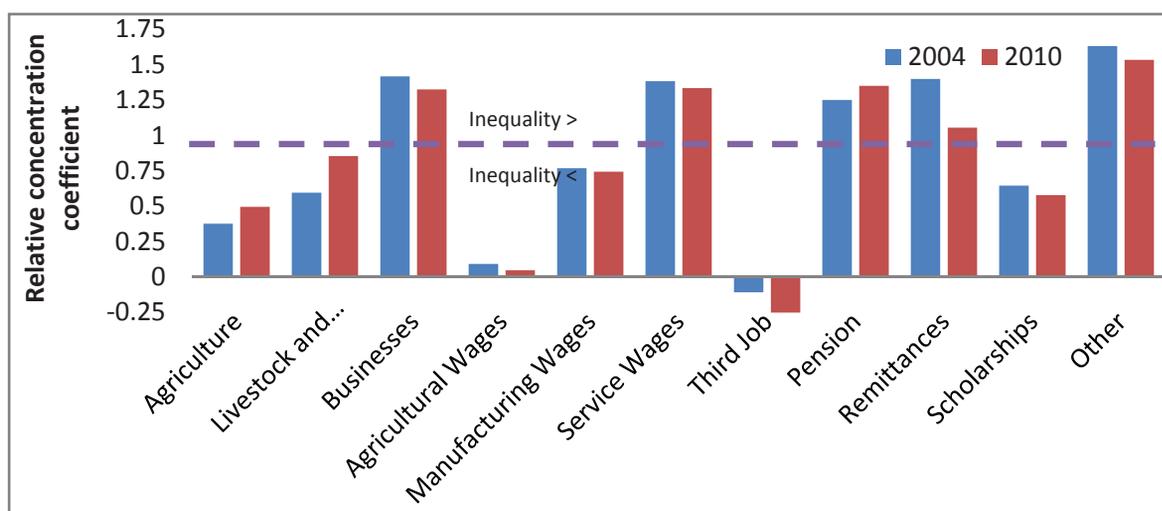
**Figure 6.10 Composition of Income in Rural Areas, 2010**



Source: 2010 VHLSS.

6.50 Figure 6.11 presents relative concentration coefficients which indicate whether an income source is inequality increasing or inequality decreasing. If the relative concentration coefficient is greater than 1, then the source is inequality increasing, while if it takes on a value less than 1, the source of income is inequality decreasing. Figure 6.12 shows the contribution of the different sources of income to the Gini Coefficient of inequality, including their share of total income.

**Figure 6.11 Relative Concentration Coefficients of Different Sources of Income, 2010**



Source: World Bank estimates from a Shorrocks decomposition by income source.

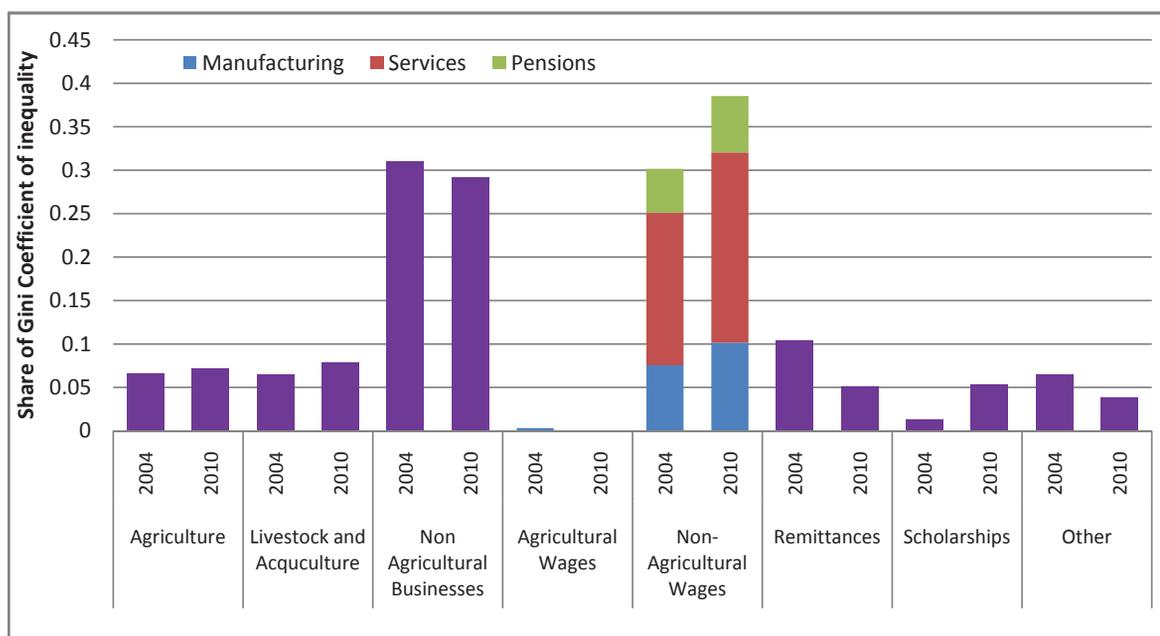
Note: A relative concentration coefficient greater than 1 suggests that the income source is inequality increasing, and a value less than 1 suggests that it is inequality decreasing (that is, it is not disproportionately concentrated among richer households).

6.51 Income from the agricultural sector, notably income from crop activities, agricultural wage labor, and livestock and aquaculture, is inequality decreasing. Agricultural wage labor and cropping activities are among the most equalizing income components.<sup>52</sup> A rise in the relative concentration coefficient of agriculture between 2004 and 2010 implies that the extent to which agriculture was equalizing declined over time. Relative to its share of income, however, the contribution of the agricultural sector to overall inequality is low; the agricultural sector (including agricultural wages) contributed approximately 29 percent of total income but accounted for only 15 percent of inequality. In rural areas, agricultural sideline activities were a relatively equalizing source of income in 2004; in 2010 they had become mildly disequalizing, a change that reflects the faster growth in these sources of income among richer rural households.

6.52 The distribution of remittance incomes has become more equalizing over time in both rural and urban areas. In 2004, the share from remittances in the richest quintile was double that in the poorest quintile; by 2010 the shares of remittances were similar. The change in the distributional impact on remittances appears to be predominantly driven by changes in migration patterns among richer households. The quantitative and perceptions studies both suggest a declining role for higher-paid international migration among richer households; the share of remittances coming from international migration has declined from 35 percent of remittances to 30 percent over time. Income from remittances dropped in absolute terms in the top quintile, and the share of international remittances declined from 47 percent of remittance income to 42 percent among the richest 20 percent of the population.

<sup>52</sup> Agricultural sidelines activity, notably livestock, aquaculture, and agricultural services, are the least equalizing of all agricultural sources and contribute more to income inequality than crop income. This is corroborated when examining the structure of incomes across income quintiles; sideline activities continue to be an important source of income for both rich and poor households.

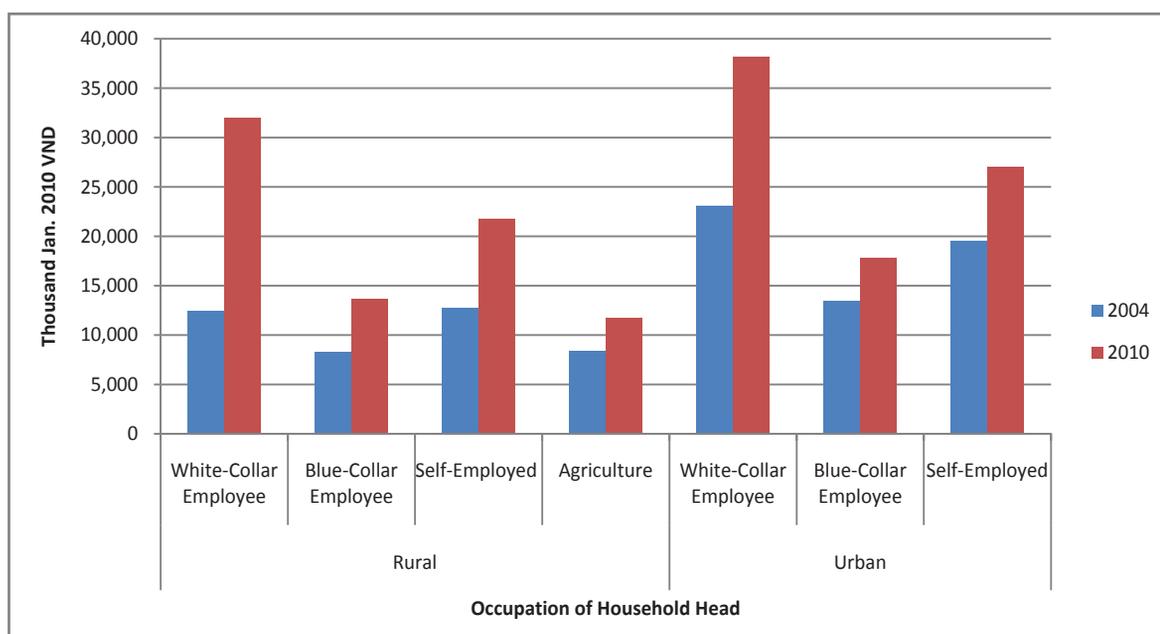
**Figure 6.12 Contribution of different Income Sources to the Gini, 2010**



Source: 2010 VHLSS.

6.53 Households working in the nonagricultural sector earn more than those working in the agricultural sector, and their incomes have grown at a faster pace. Figure 6.13 shows per-capita incomes conditional upon the sector of employment of the household head. Incomes of households with a household head employed in white-collar occupations in the nonagricultural sector are highest in both urban and rural areas, followed by the incomes of self-employed nonagricultural workers. In rural areas, households whose head works in agriculture have the lowest incomes in both periods and the lowest average growth. Note that the difference between these households and agricultural households was relatively small in 2004 but has grown over time.

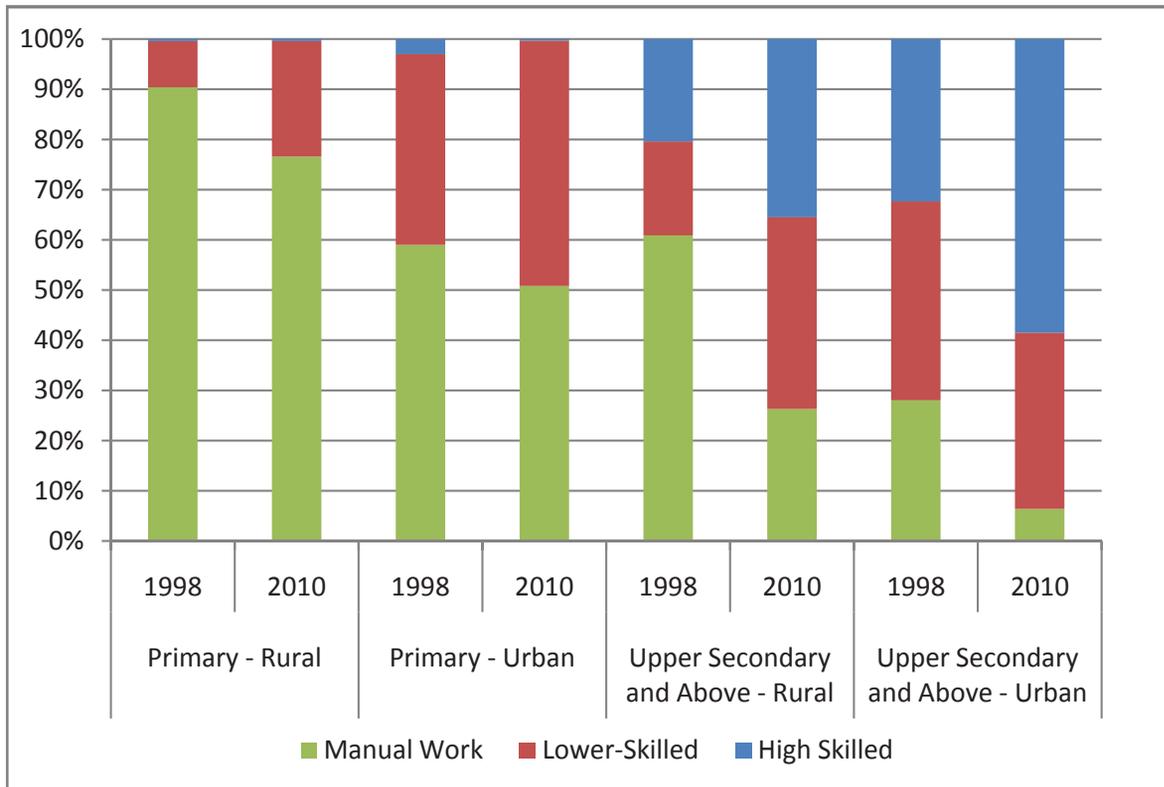
**Figure 6.13 Per-capita Income per Year by Occupation of the Household Head in Rural and Urban Areas, 2004 and 2010**



Source: 2004, 2010 VHLSS.

6.54 Education is an important determinant of whether an individual works in the agricultural or nonagricultural sector, and the type of nonagricultural work conducted. The relationship between education and employment type can be readily seen for more recent labor market entrants who have completed their schooling. Figure 6.14 shows the structure of employment for workers aged 25 to 30 in 1998 and 2010. Having an upper secondary education or above is a significant determinant of having nonagricultural employment, and those with a college education are the most likely to be found in more attractive, higher-skilled employment.<sup>53</sup>

**Figure 6.14 Workers Aged 25-30 by Education Level and Job Type**



Source: 2010 VHLSS.

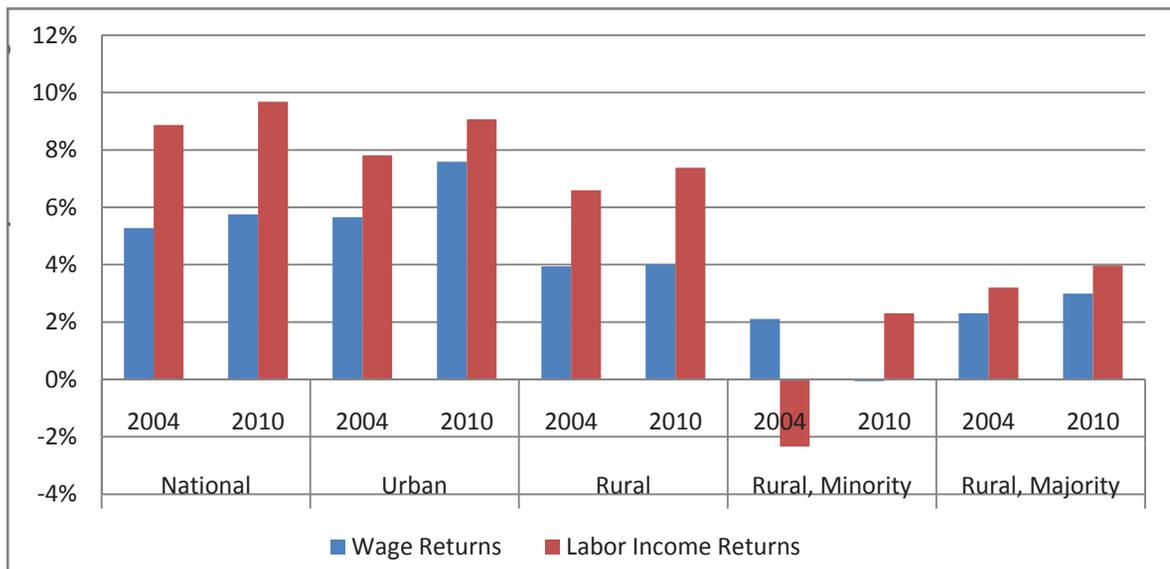
Note: High-skilled workers are professional/office workers. These positions are usually classified as white-collar work. Lower-skilled workers are workers in the service sector, sales, machine operators, and skilled manual/handicraft workers. Manual workers include agricultural laborers and unskilled manual workers.

6.55 Returns to education have increased over the 2000s, with substantially larger increases for workers in urban areas (figure 6.15). Empirical work carried out for this report finds evidence of rising returns to education in the wage labor market during the 2000s; for non-agricultural jobs, the hourly wage return to a year of schooling increased from 5.3 percent in 2004 to 5.8 percent in 2010. The labor income return to education (based on total earnings) is greater than the wage return (based on

<sup>53</sup> Those with upper secondary education and above are still likely to be found doing unskilled work in rural areas, either in the agricultural sector or as an unskilled manual laborer in the nonagricultural sector. In the qualitative assessment, focus groups in rural areas discussed instances where individuals who had obtained higher education were unable to find skilled work (either lower- or higher-skilled work), and hence returned to farming. They attributed this worrying observation to differences in the quality of education between urban and rural areas, and to students choosing fields of study, such as pedagogy, for which labor market demand is limited.

hourly earnings) to education, since more-educated individuals work longer hours in the wage labor market than less-educated individuals. An additional year of education is estimated to have raised labor incomes by 9.7 percent in 2010 compared to a labor income return of 8.9 percent in 2004. Returns to education are higher for workers in urban areas than in rural areas and have risen faster over time. In urban areas, an additional year of schooling was associated with a 7.6 percent increase in hourly wages, while in rural areas it was associated with a 4.1 percent increase. Within rural areas, returns to education among ethnic minorities are lower than those accrued by the majority, and appeared to decline between 2004 and 2010. The lower returns for ethnic minority workers reflect the fact that minorities tend to work in lower-paid occupations, including wage employment in the agriculture sector.

**Figure 6.15 Hourly Wage and Labor Income Returns to Schooling**



Source: 2004, 2010 VHLSS.

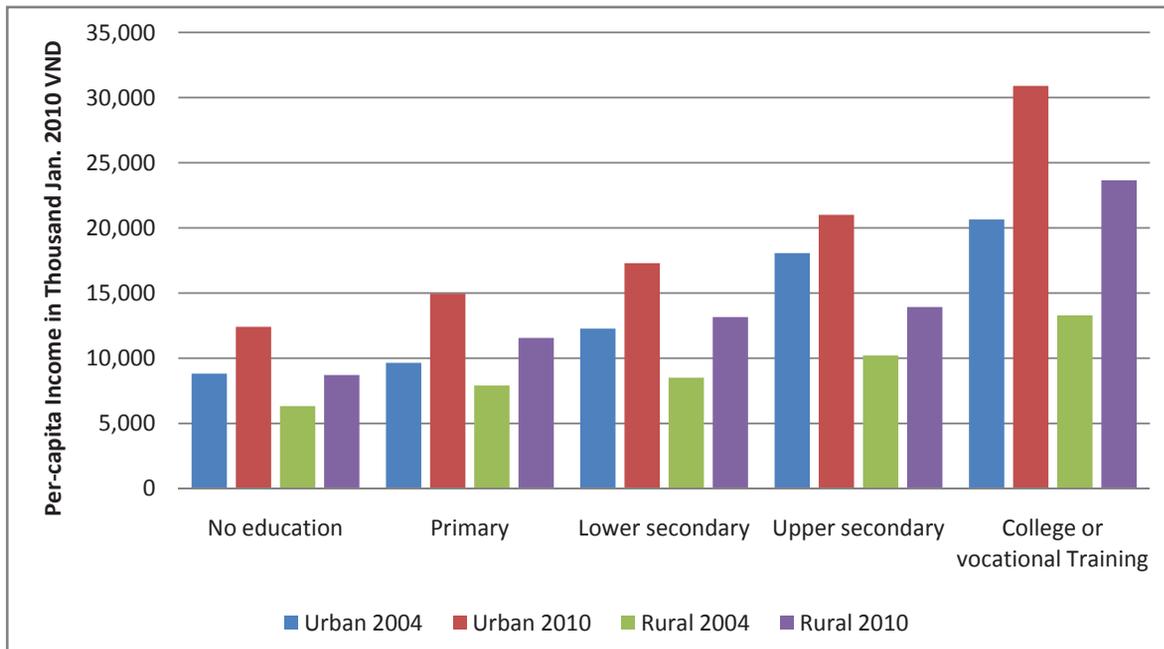
6.56 The increase in returns over time has increased the gap between the wages and incomes of individuals with higher and lower levels of education (World Bank staff estimates).<sup>54</sup> Since education is unequally distributed across the working-age population and adjusts only slowly over time, some people will benefit more from nonagricultural growth and higher returns to education than others. Therefore, nonagricultural growth and rising returns to education are associated with rising inequality in income.

6.57 The link between education and rising income inequality can be explored through examining the relative gap between the incomes of more and less educated households, which rose between 2004 and 2010. In 2004, households with at least one working-age individual with a college education earned 1.3 times more income than those with an upper-secondary-educated individual, and 2.5 times more than households with no education. By 2010, the college-educated households earned

54 There has been a substantial rise in the returns to education over time, although the majority of this rise has been driven by urban areas. Assessments of the average wage earned by individuals with different levels of education find low rates of return in the early 1990s. In 1993, the return to education using a basic Mincerian earnings equation was found to be approximately 4 percent (Gallup 2002; Glewwe and Patrios 1999). Returns in the 1990s were low by international standards, although they were similar to rates of returns found in China in the early 1990s (Psacharopoulos 1994).

1.7 and 3 times more, respectively. Figure 6.16 shows income in urban and rural households, by education level. More educated households earn more than less educated households, and the incomes of the most educated households grew faster than all other education categories between 2004 and 2010 in both rural and urban areas. Although urban households continued to earn more in every education category in 2010, as they did in 2004, the ratio of incomes of rural households to urban households at education levels above lower secondary has fallen over time. This suggests that the decline in mean incomes between rural and urban areas is due to the relatively richer, more educated individuals in rural areas catching up to their urban peers, rather than to catch-up at the bottom end of the income distributions.

**Figure 6.16 Per-capita Income per Year by Education of most Educated Working-age Household Member, Urban and Rural Households, 2004 and 2010**



Source: 2010 VHLSS.

### E. Inequalities in Opportunities that Perpetuate Income Differences across Generations

6.58 The analysis of opportunities is predominantly focused on education. This choice of focus was driven in part by the perceptions study; education and employment were central concerns in many focus groups. This focus was also motivated by the empirics, which suggest an increasingly important role of education as a determinant of income inequality. It is recognized that the focus on education comes at the exclusion of other important opportunities that drive inequality, however, in particular access to health care and basic public services.<sup>55</sup>

6.59 Growth in the demand for educated labor and increases in the return to education in urban areas imply that education is an increasingly important—and dividing—asset in Vietnam. Education levels in the labor market and in households are rising as more educated younger cohorts join the labor market and less educated older cohorts retire. However, the stock of education among the

<sup>55</sup> For an excellent discussion on inequalities in these other important dimensions, see the background paper for the 2008–2010 Vietnam Poverty Assessment by Hoang et al. (2010).

working-age population changes slowly in response to changing returns; therefore, initial differences in education endowments can translate into large differences in incomes as returns to education rise and the demand for skilled labor in the nonagricultural sector grows.

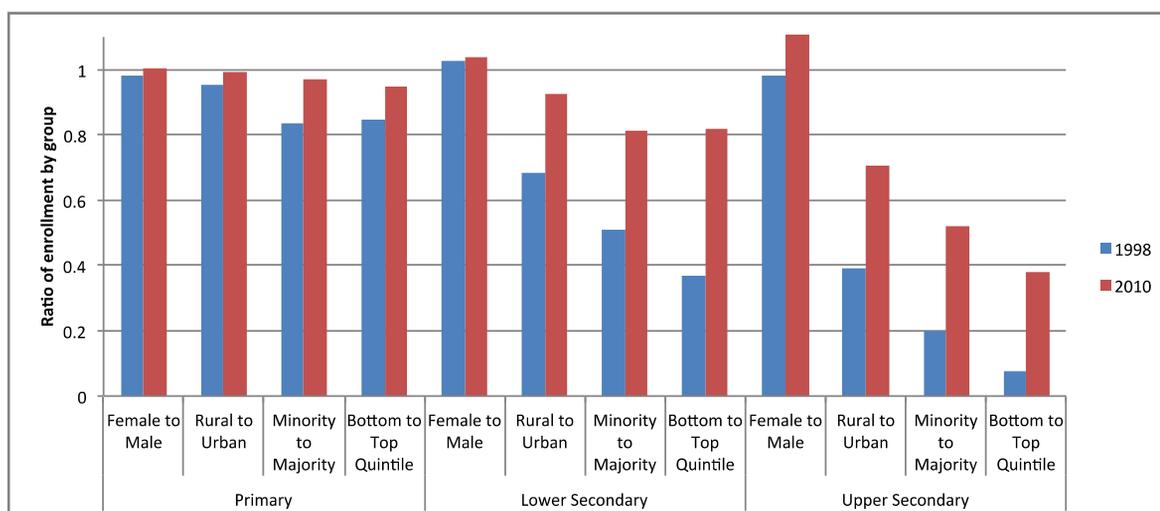
6.60 Whether income inequality and disparities will perpetuate across generations depends on whether investments in human capital among younger generations are responding to changes in income generation opportunities, or whether they reflect inequalities in opportunities linked to their circumstances of birth, such as where a child was born, the characteristics of their parents, or ethnicity. The evidence suggests that inequalities in education are likely to be transmitted to future generations, implying that deprivations continue to be perpetuated across generations and require decisive action.

6.61 The transmission of deprivations across generations was reflected in multiple focus group discussions, where groups highlighted that children born to poorer households were likely to drop out of school earlier than those born to richer households, and to work in less-skilled occupations. Many participants recognized that gaps in education enrolment have narrowed between better-off and worse-off households at lower levels of education, but suggest that gaps remain at higher levels of education, and quality gaps arise at all ages, implying that poverty perpetuates across generations. As one member of a lower-educated migrant group expressed it,

*“Education is an important cause of inequality. Without education, I work as an unskilled worker and send my children to lower-quality schools. With a good education and income, I could send my children to good schools. It is a vicious cycle.”* (lower-educated migrant group, Ho Chi Minh City)

6.62 Substantial progress has been made in equalizing enrolments and completion rates at the primary level. Between 1998 and 2010, differences in enrolments at the primary and secondary level have narrowed across the rich and the poor and in rural and urban areas, as can be seen in figure 6.17. At the primary level, educational enrolment is close to universal for all groups, although important differences remain between ethnic minorities and the majority, and across minority groups, as discussed in Chapter 5.

**Figure 6.17 Ratio of Enrolments in Primary, Lower Secondary, and Upper Secondary School by Various Groups, 1998 and 2010**



Source: 1998 VLSS, 2010 VHLSS.

6.63 Educational investment continues to be unequally distributed at higher levels, an inequality that will feed into inequalities in outcomes later in life. Gaps in enrolment at an upper secondary level continued to be high in 2010, and a child's background plays a large role in determining their educational attainment at a higher level. Upper secondary enrolment for children in rural areas is still only 70 percent of enrolment rates for children in urban areas, and ethnic minority enrolment is only half that of the majority. Only four poor students are enrolled in upper secondary school for every 10 richer students enrolled. Since many of those richer students will continue on to college or university, the final education difference between students residing in the top and bottom income quintiles will be wider than it is for upper secondary education.

6.64 The characteristics of a child's parents and household wealth continue to be significant predictors of whether a child is enrolled in lower secondary or upper secondary school, although their impact on enrolment diminished between 1998 and 2010. Educational enrolment at the secondary level is affected by income, which can be considered a short-term liquidity constraint, and is linked to longer-term, or permanent, factors such as parental education (World Bank 2011).<sup>56</sup> The evidence also suggests that the impact of income on education decisions is twice as large for ethnic minorities as for the Kinh/Hoa majority (World Bank 2011).

6.65 Beyond family background, the quality of schooling is an important factor that influences the skills that a child acquires in school. At the primary level, the characteristics of teachers, schools, and classrooms are statistically significantly related to student achievement in math and science, and these inputs have been found to be unequally distributed across schools in Vietnam (World Bank 2011).

6.66 Evidence from the Young Lives data suggests that children from poorer households perform worse on math tests prior to entering primary school, and continue to perform worse than children from richer households throughout primary and lower secondary school. Figure 6.18 shows the average rank of children in math tests at ages 5, 8, 12, and 15 by household wealth quantile. At age 5, prior to entering school, the average math scores of children increase with wealth quantiles, so that children from the poorest 25 percent of households have lower scores, on average, than children from other wealth quantiles.

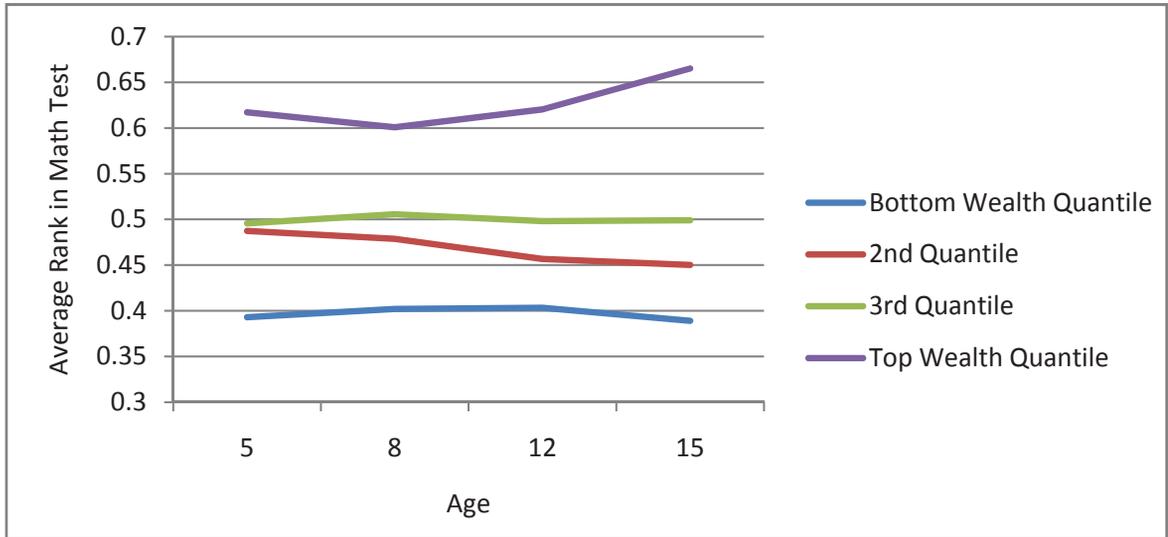
6.67 Most worrisome, the circumstances that a child is born into appear to be a more important determinant of success than a child's potential when entering school. Figure 6.19 shows the score trajectories of children who had math scores in the top and bottom 20 percent at age 5. Trajectories are divided by the wealth status of their households at age 8. We can see that high-scoring children from poor households perform poorly relative to their high-scoring peers from rich households. Similarly low-scoring children from rich households make more substantial gains in their scores over time than low-scoring children from poorer households.

6.68 The perceptions study indicates that parents perceive significant variation in the quality of education across rural and urban areas at all levels of education. A frequently raised concern is that teachers in rural areas at higher levels appeared to be less qualified than those in urban areas, and that the poor were unable to afford to send their children to the same quality schools as rich children.

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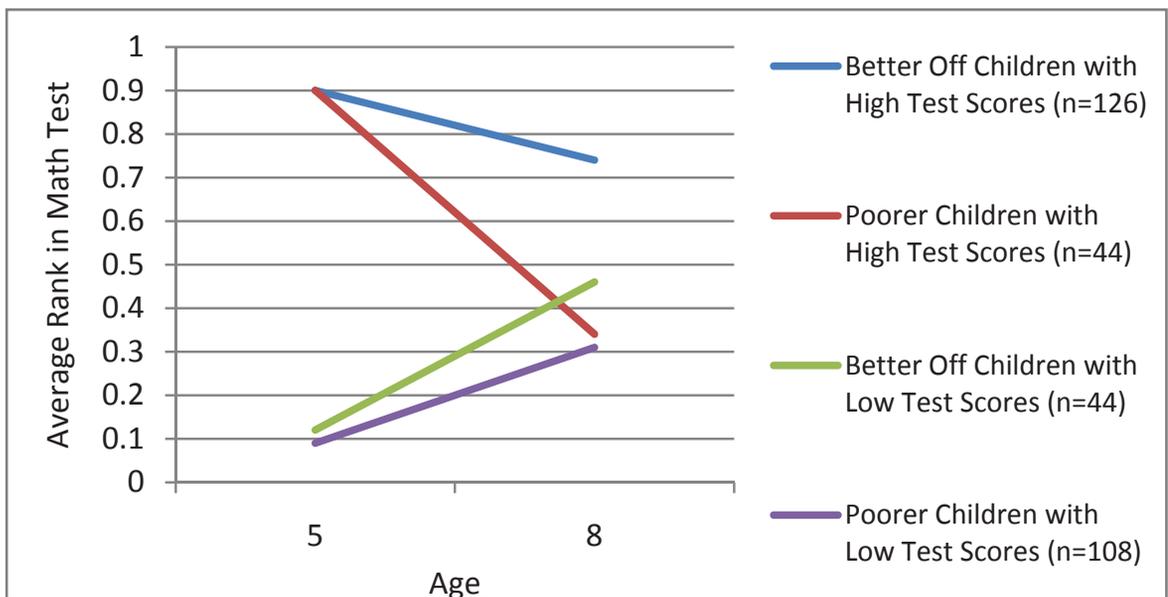
<sup>56</sup> Income is also likely to be related to unobserved correlates such as local returns to education, which are also likely to positively influence education decisions. Furthermore, income is unlikely to reflect a true liquidity constraint since households also have access to savings and formal and informal credit institutions.

**Figure 6.18 Average Rank in Math Test, by Wealth Quantile, at Ages 5, 8, and 15 Years**



Source: World Bank staff estimates using Young Lives data.

**Figure 6.19 Average Rank in Math Test, by Initial Test Score and Wealth**



Source: World Bank staff estimates using Young Lives data.

6.69 A striking perceived inequality in education quality is found between richer and poorer households in urban areas, where the rich children can go to high-quality schools, attend extra classes, and pay private tuition, including for English and computer courses. Meanwhile, poor children attend average schools with few extra classes. In the past, there was little differentiation in the quality of education services, but now such differentiation in the cities in Vietnam is perceived to be very big, and the rich are viewed as having the capability to invest in better-quality education for their children. For example, a student from Ward 26 in Ho Chi Minh City reports that:

*“As early as the child is still in preschool, the rich families will start to seek their way into good primary schools, the poorer families just want their children to be literate, so they don’t care about which school their children are going to. Previously, there was a small number of international schools for the rich families to choose from, both rich and poor students would attend the same school, now there are more schools providing a wider range of services, the rich-poor gap also gets widened.”*

6.70 Unequal education quality is perceived to start from an early age, with children from poorer households sending their children to lower-quality kindergartens. Some poorer households in An San ward, Tam Ky city, Quang Nam, reported not being able to afford to send their children to kindergarten. Others who were able to do so expressed concerns about quality differences between the preschools attended by their children and those attended by children from wealthier backgrounds:

*“The disparity can be found right from the preschool level. The poor households, who try their best, can send their kids to school[s] that cost 500,000 VND per month. The better-off households, on the contrary, send their kids to key schools that ask for fees of 700,000 to 900,000 VND per month. The diet and care services among these schools are different.”*

6.71 Although empirical evidence on quality differences at higher levels of education is limited, looking at the composition of education expenditures across households can give insight into why quality differences may emerge. As noted in Chapter 1, spending on inputs like extra courses is substantially higher among richer and urban households at the lower and upper secondary level, and the amount spent on these courses has increased over time among the richest households. These trends are strongest in urban areas, but can also be seen in rural areas. If children from richer households are able to benefit from extracurricular activities and additional training through tutoring and foreign language studies, they are likely to receive a higher-quality and more rounded education than children from poorer households.

6.72 There is evidence of inequality of opportunities in Vietnam beyond education, and that circumstances beyond the control of an individual contribute substantially to these inequalities in access to basic services. Attitudes toward inequality, and whether it is perceived as unjust, unnecessary, and undesirable, depend on the processes that form it. An important factor is whether inequalities are perceived to be driven by differences in factors for which the individual can be held accountable (“efforts”) or are due to circumstances that fall beyond an individual’s responsibility (“circumstances”) (Roemer 1998). Factors beyond an individual’s control that lead them to have different levels of well-being can thus be considered inequalities of opportunity (Paes de Barros et al. 2009).

6.73 The Human Opportunity Index (HOI), developed by Paes de Barros et al. (2009), captures inequality of opportunity by examining the extent to which the circumstances that children are born into, such as gender, parental education, and ethnicity, affect the likelihood of their access to basic building blocks of human capital, such as education and health services. The index captures two moments of access to basic services. It captures absolute levels of access, and then calculates how different the access rate is across gender, location, parental background, income, and other indicators capturing circumstances. The degree of inequality is measured by the D-index, which captures the dissimilarity in access rates due to differences in circumstance. Differences is the degree of inequality of opportunity and can be interpreted as the fraction of a given inequality that needs to be redistributed in order to achieve equality. The D-index measure of inequality of opportunity is used to scale down the average national access rate of a service to the given HOI.

6.74 The HOI in Vietnam was examined between 2004 and 2010 in a background paper for the poverty assessment led by researchers from the Vietnamese Academy of Social Sciences, with inputs from the World Bank (VASS 2012). Opportunities for access to basic building blocks were examined in three domains—education, health, and housing infrastructure—and the paper investigates whether access to these basic foundational blocks is evenly spread across children in the population or circumscribed by inherent characteristics beyond an individual’s control. The circumstances examined include a number of individual and household characteristics, including gender, parental education and well-being (expenditures), location, and ethnicity.

6.75 In international comparisons with countries in Africa and Latin America and the Caribbean, Vietnam fares well on some dimensions, such as access to electricity and school attendance, and poorer on others, such as access to piped water and flush toilets. Specifically, the HOI for school attendance is higher than that of most African countries and several countries in the Latin America and the Caribbean region, while the HOI for access to electricity is higher than all African countries and only slightly lower than most Latin American and Caribbean countries. The international comparison is, however, less favorable in other dimensions. Vietnam's HOI for access to piped water is higher than only some African countries, and it is lower than all Latin American and Caribbean countries. The HOI for flush toilets is in the middle of the whole range of African and Latin American and Caribbean countries. However, Vietnam falls considerably behind top-performing countries in both of these basic services.

6.76 Although equality of access is high for education "quantity" in 2010, the HOI suggests that the quality of education is more divergent across the population. Among 7-to-11 year-olds, both the coverage rate and HOI are high, suggesting that there are low inequalities in accessing primary education, and access overall is high. At the lower secondary level, however, although the coverage rate is high, the evidence suggests that there are some inequalities in access. The education of the household head is the most important characteristic determining whether a child attends lower school between ages 12 and 15, followed by household well-being (expenditure). These two circumstances account for more than 50 percent of the dissimilarity. Although ethnic minorities have lower education outcomes, ethnicity alone plays a smaller role than well-being and education of the household head, a finding that suggests that differences in other circumstances contribute substantially to and reinforce inequalities across ethnicities.

6.77 The quality of schooling received by a child is measured by his or her ability to advance independently to lower secondary school without help when he or she is in the last grade of primary school. Only 62 percent of pupils in grade 5 would be able to advance to the lower secondary school without help. The considerable difference between the HOI of the quantity and quality dimensions of education suggests that a greater emphasis needs to be placed on raising quality in the education system, in general, and primary school, in particular. Household well-being and education are the two most important circumstances determining the quality of education received.

6.78 Although the HOI for access to electricity and improved water sources is high, the coverage of access to improved sanitation facilities is lower and less evenly distributed than the other infrastructure measures. Although there was significant progress during 2002–08, and further improvement in 2010, the coverage rate was approximately 64 percent in 2010, suggesting that more can be done to improve access to this basic service.<sup>57</sup> Furthermore, a substantial gap between the coverage rate and HOI indicates a remarkable inequality in access to this service. The region a household is located in plays the biggest role in determining access to clean water and sanitation, followed by a household's well-being, ethnicity, and the education of the household head.

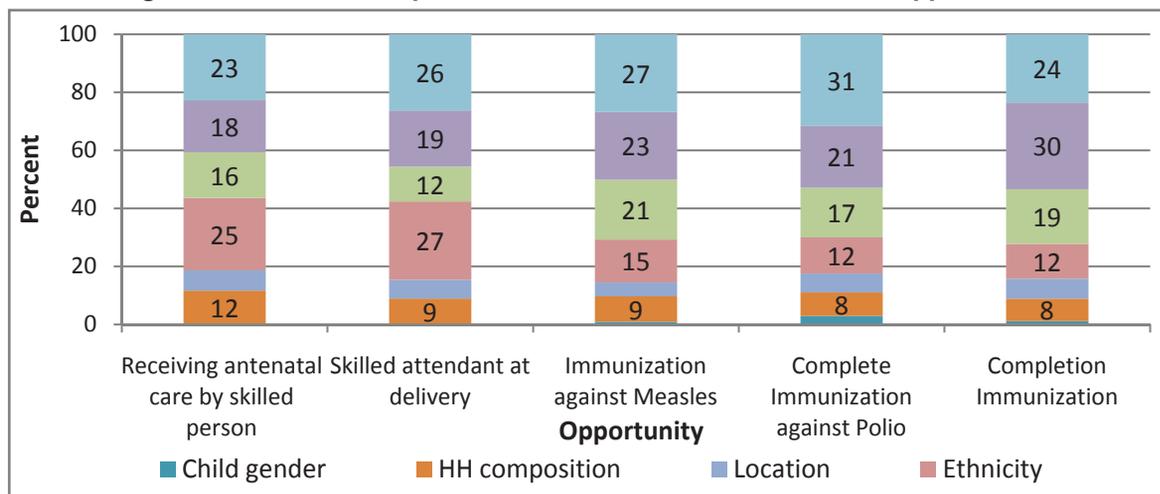
6.79 The HOI is high for some indicators of health and low for others. Notably, the index suggests that Vietnam is doing well on the fraction of women receiving prenatal care, assistance at delivery, and child immunization against measles; 92 percent of children aged 1 to 5 were vaccinated against measles in 2010. Immunization against polio, however, displays a lower coverage rate.

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<sup>57</sup> Due to changes in the sampling frame between 2008 and 2010, it is not possible to compare the progress achieved between 2002 and 2008 to that achieved between 2008 and 2010. Therefore, access to improved sanitation facilities is analyzed separately in 2010.

6.80 Household well-being is a leading determinant for opportunities in the health domain. Figure 6.20 shows the relative importance of circumstances for key health indicators in 2010, decomposed into the fraction attributable to different circumstances. Ethnicity is the most important circumstance for access to care for mothers, and accounted for one-quarter of dissimilarities in receiving prenatal care and assistance at delivery. Among children, household well-being, region of residence, and the education of the household head account for 65 percent or more of the dissimilarity in opportunities.

**Figure 6.20 Relative Importance of Circumstances for Health Opportunities**



Source: VASS 2012.

6.81 An analysis of the HOI at the region level suggests that there is substantial heterogeneity across regions with regard to access to improved sanitation facilities in both the initial year examined, 2002, and in improvements between 2002 and 2008, and in 2010. The South East shows the largest and most stable increase, while the North West had a very low HOI in 2002, which improved in a slow and unstable manner.

## F. Inequalities in Connections, Voice, and Influence

6.82 Qualitative and quantitative evidence suggests that inequality in Vietnam reflects processes that may be more socially and economically damaging, such as inequalities in social and political capital, which manifest themselves through inequalities driven by influence, connections, and uneven voice. Inequalities of these forms were raised in many focus groups, urban and rural, rich and poor alike, as an important driver of inequality, and were identified as having risen in recent years.<sup>58</sup>

6.83 Corruption has been recognized in previous work as a systemic problem in Vietnam, and the qualitative evidence reflects many of the issues raised in previous analyses of corruption and transparency in the country (Anderson et al. 2009; Cecodes, FR, CPP, and UNDP 2012; World Bank 2010; World Bank, Embassy of Sweden, and Embassy of Denmark 2011), but does so through the lens of rich-poor differences and inequality, therefore shedding light on how inequalities in socioeconomic outcomes interact with, are magnified by, and are perpetuated by inequalities in power and connections. Inequality of treatment by public authorities was raised with respect to a

<sup>58</sup> Quantitative evidence suggests mixed trends in reported corruption, as would be expected (World Bank 2010). Surveys of firms suggest that corruption is less of an obstacle for their operations, but the same surveys show that the magnitude of bribes, as a percentage of revenues, has not declined. Individual reports from household surveys suggest that, while citizens do not find that corruption has worsened, they do not report that the situation has improved (World Bank 2010).

number of things, from land conversion practices that favor investors over landholders to the uneven quality of public service delivery in hospitals and public notaries that led to frustration among poorer and less-well-connected individuals.

6.84 Rural respondents were concerned about increasing disparities in employment opportunities in the public sector, and cited the need to pay bribes or have connections to obtain jobs as teachers, doctors, in state-owned enterprises, and as public officials.<sup>59</sup> These concerns were widespread and expressed by individuals from all backgrounds, including commune officials. Evidence from the nationally representative Provincial Administrative Procedural Index study suggests that 29 percent of individuals agree that bribes are required to obtain jobs in the public sector, and nearly half of all respondents believe that connections are important in obtaining various types of state employment (Cecodes, FR, CPP, and UNDP 2012). Moreover, these views are shared in urban and rural areas.

6.85 Unfair recruitment mechanisms in the public sector are linked to concerns about youth unemployment following substantial investment in higher levels of education. Focus groups of youth, in particular, voiced frustration with perceived procedural inequalities that affected their ability to translate their education into good jobs, such as the unfair roles of power and relationships to get public sector employment. In their words:

*“Money is not enough. Money without connections can’t get you a job in the public sector. I know some cases where the workers quit their job in pursuit of higher education but after graduation, they returned to work in the previous position as if they had never attended such courses.”* (better-off group, Cam Hung commune, Hai Duong)

*“In my place, there are some guys who have to work as simple workers after completing university just because their families do not have 50 billion VND to 70 billion VND to bribe their way into an agency just to work as an administrative assistant. Many with poor academic performance somehow passed university entrance exams and were placed [in] a job after graduation. This is irrational but unlikely to abate in the future.”* (senior citizen, Cam Hung commune, Hai Duong)

6.86 In peri-urban areas undergoing conversion of agricultural land into nonagricultural land for industrial zones, inequalities in outcomes related to land were seen as an unfair source of disparities, whereby people with connections and information gain from land speculation while those without are unable to convert their land into income. Focus group participants perceived that the current land conversion policies and processes favored commercial investors, and that local landowners did not secure their rights to proper compensation and resettlement, effective vocational training, occupation replacement, and employment generation. As one group expressed it:

*“Many owners of bogus projects have exploited loopholes under Decree 64 to appropriate land from local farmers with false claims of using it [the land] for public utilities.”* (poor group, Me Tri, Ha Noi)

6.87 Focus group participants raised concerns suggesting that corruption in land management is regressive since it involves a transfer of land at lower-than-market prices from poorer households to relatively well-off investors. People with connections and access to information were reported

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59 In 2010, the public sector (including state-owned enterprises and civil servants) accounted for only 4 percent of nonagricultural work and 15 percent of wage or salaried jobs, but for 52 percent of high-skilled jobs in rural areas. In urban areas, the data suggest that public sector jobs account for 9 percent of all nonagricultural work, 28 percent of wage or salaried jobs, and 42 percent of high-skilled jobs. Ho Chi Minh City stands out as having the highest private sector opportunities in the nonagricultural sector, while the North West mountains regions have the lowest private sector opportunities for highly skilled wage or salaried work.

to have made substantial profits from land speculation and trade, while those who lost land in the process have to struggle for their basic necessities after land conversion. A key concern here is speculative behavior, wherein land was bought at a low price and resold shortly after at a higher price, as reported by youth in Me Tri, Ha Noi:

*“People in [the] land sector they know in advance the information so that they can advise others to buy land when the price is low and then sell it out at much higher prices.”*

6.88 Unequal access to public services was another major source of concern across focus groups, with differences in treatment noted between those who “do politics” and ordinary people. Concerns about access to quality public services are widespread and cover multiple forms of public services, from lengthy administrative procedures such as registering a marriage to the length of wait and quality of treatment given by doctors and hospital staff in public hospitals. In addition, concerns were raised in multiple settings regarding who receives the benefits from public social assistance programs targeted at the poor.

6.89 It is perceived that those who have been officials of government agencies are often given priority when they go through administrative procedures. In particular, a commonly voiced concern was that richer people use bribes to better access education or health care services. Participants expressed concern over the predominance of valuing money over traditional ethical values on the part of employees in public services as outcome inequalities widen. As one person put it:

*“For example, when it comes to doing paperwork at the ward people’s committee, if you had been with the state before you retired, you will still be given priority over other ordinary people. Even if you have to queue up, you will still be quicker to have the paperwork done than the others. Likewise in hospital, if you are an average person, you will not get the same treatment as the privileged.”* (youth group, Ho Chi Minh City)

6.90 The use of power, connections, and corrupt means to get ahead in life and acquire better public services and employment opportunities was seen as unacceptable by many focus group participants, and was a key source of frustration. The evidence suggests that whether inequality in outcomes is viewed as acceptable or not appears to depend more on the process by which the inequality is generated than on the level of disparity. A key concern among focus group participants in both urban and rural areas was whether existing inequalities in outcomes were generated through fair or unfair means, such as corruption, misuse of power, and dishonest business practices. Unfair use of political capital and corruption were perceived to have affected well-being through multiple routes, from employment opportunities and land conversion to the ability to access high-quality public services and education.

6.91 If left uncurbed, inequalities in voice and connections that manifest themselves in a myriad of forms, from uneven land conversion practices to poor public service delivery, are likely to be damaging for social cohesion, economic progress, and growth. In the perceptions study, these inequalities provoked the most concern and frustration among participants, and were the focus of lengthy discussions. Inequalities in voice and connections are likely to play a role in determining whether individuals tolerate rising inequality in the future, directly through a sense of injustice and indirectly through their revised expectations of growth. There are suggestions that this may already be occurring via a reduction in the perceived return to education in rural areas, where focus group participants have suggested that their inability to translate education into employment opportunities, in part due to a lack of transparent recruitment mechanisms, has diminished their perception of the value of education for future generations. Box 6.1 discusses policy recommendations for dealing with inequality.

### **Box 6.1 Emerging Policy Recommendations: Inequality**

Three key messages emerge for policy makers in Vietnam from the analysis of inequality.

First, income inequality has risen in Vietnam, indicating that growth processes have been less favorable to poorer households and that poorer households are being left behind. Ethnic minority households have experienced slower growth on average than Kinh majority households, although there is substantial variation among minority households depending on endowments and sources of income. There is evidence of regional variation in growth rates, which has contributed to the rise in inequality. In addition, households characterized by lower average education levels are less likely to benefit from growth processes and to transition into the nonagricultural sector than more educated households. These patterns suggest an active role for policy to help households overcome the structural constraints facing poorer households that limit their growth potential.

Second, inequality of outcomes affects the opportunity of children to fulfill their potential, and circumstances overtake potential early in life in Vietnam. Evidence presented in this chapter suggests that children who show promise at age 5 are unable to sustain that promise by age 8 to the same degree as their peers from better-off households. Inequality in opportunities of this form are likely to dampen growth and progress in Vietnam, since they imply that the full potential and talent of Vietnamese children are not being fully achieved. Moreover, it contributes to social tensions. Closing the gap in early childhood development and education quality in Vietnam is, therefore, desirable in terms of both equity and efficiency.

Finally, there is widespread concern that inequality in connections, influence, and voice is affecting many aspects of Vietnamese peoples' lives, from the ability of individual's to attain public sector employment to obtaining access to good-quality public services and administration. These inequalities in political and social capital are not acceptable to Vietnamese citizens from all backgrounds, and inequality in income and spending that is due to unfair processes is less tolerated than inequality that arises through talent and hard work. Promoting transparent processes in Vietnam is necessary to ensure equitable growth—growth that is viewed as fair by its population.

## Chapter Annexes

### Annex 6.1 Why do “Perceptions of Inequality” Diverge from Empirical Measures of Inequality?

The empirical measurement of inequality includes four components (Cowell 2011). Perceptions of inequality may differ from empirical measures of inequality due to the following considerations: (a) the factor examined, (b) the unit of analysis, that is, whether a household or individual; (c) the reference group, that is, the universe of comparison, such as inequality at the national, regional, rural, or urban level; and (d) the inequality thermometer, or the tool used to capture changes in inequality, such as the Gini or Theil index. This section examines why perceptions may vary from empirical measures of inequality.

First, it may be that our measures of inequality focus disproportionately on easily measured dimensions of inequality, such as outcomes, while Vietnamese people focus on other dimensions of inequality, such as the quality of education they receive or whether there is perceived unfairness in society. This chapter discussed modalities of inequality as they were perceived through the eyes of Vietnamese people. Not all modalities of inequality were discussed in each focus group, and the emphasis on different modalities of inequality varied substantially by group. For example, young working people often discussed employment inequalities in greater detail; ethnic minorities paid more attention to livelihood-related modalities of inequality in terms of access to market, credit, and technical services; and students and senior groups talked more about education and the unfair roles of power and connections in employment.<sup>60</sup>

Second, perceptions may differ from empirical measures because the frames of reference used in empirical analysis differ from that used by individuals when thinking about inequality. In contrast to most empirical measures of inequality, which capture inequalities at the national, regional, rural, or urban level, perceptions of inequality are often rooted in direct life experiences and have a narrower focus. Groups often discussed disparities within their communities, and then conceptualized a step up from their income levels to compare themselves with people in more favorable places or higher positions. For example, in contrast to the decline in inequality attributable to differences between rural and urban areas, rural respondents perceive inequality between rural and urban areas to have risen. However, in contrast to the empirical measure of inequality that compares the average level of welfare within urban areas to the average levels of welfare within rural areas, participants in the focus groups compared their own rural communities to nearby urban centers in the region. Since the empirical measures of inequality and perceptions of inequality are taking place at different levels of aggregation, it may be that, at a more local level, perceptions of inequality and measures of inequality converge.<sup>61</sup>

An empirical examination of inequality at a lower level of aggregation than normally used in a quantitative assessment may help to bridge the gap between empirical measures and perceptions of inequality. Figure 6A.1 shows inequality at a district level in 1999 and 2009, where a district is a lower

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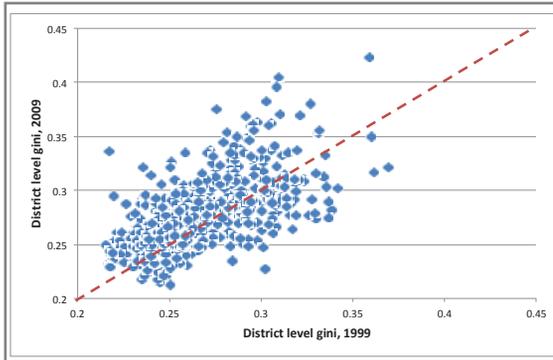
60 Another concern is that the incomes or expenditures of the rich are underreported and undercaptured in household surveys. Therefore, empirical measures of inequality may be downward biased (Cowell 2011; VASS 2011).

61 It may also be that people do not compare mean levels of welfare, but instead compare the richest people in urban areas with the richest, or poorest, in rural areas.

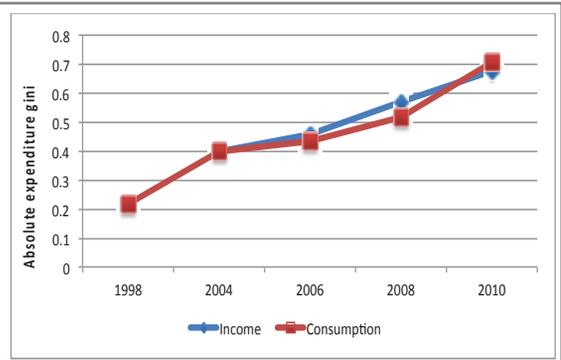
62 District-level inequality was computed using small area estimation techniques. See Benjamin et al. (2009) for more details.

unit of analysis than normally used when empirically examining inequality.<sup>62</sup> District-level inequality rose in previously low-inequality districts and fell in higher-inequality districts. While this gets closer to the unit of analysis used by our focus group respondents, since the frames of reference used appear to vary substantially across individuals, it remains an approximation.

**Figure 6A.1 District-level Expenditure Inequality, 1999 and 2009**



**Figure 6A.2 District-level Expenditure Inequality, 1999 and 2009 Absolute Gini Coefficients**



The most commonly used measures of inequality—the Gini Coefficient, the class of generalized entropy measures including the Theil index, and ratios of outcomes of people at different percentiles of the outcome distribution—capture inequality in relative terms. However, individuals may view inequality in absolute terms (Amiel and Cowell 1999; Ravallion 2004). For example, if everyone’s income rises by 7 percent, then relative measures of inequality will not register a rise in inequality even though the absolute gap has grown. Evidence from a developed country setting suggests that approximately 40 percent of individuals in a study on concepts of inequality thought of inequality in absolute terms rather than relative terms (Amiel and Cowell 1999). There is evidence in Vietnam that absolute inequality has been rising. Figure 6A.2 shows that the absolute Gini has risen in Vietnam since 1998.

Whether individuals view inequality in relative or absolute terms is very difficult to capture, and there are only hints of this in the qualitative assessment. The suggestive evidence indicates that, in Vietnam, there are likely to be some individuals who also think about inequality in an absolute sense, and others who think of it in a relative sense. Therefore, even if relative measures of inequality remain constant, they may perceive inequality to be rising. For example, the first comment below suggests one focus group was discussing inequality in absolute terms, while the second comment suggests that another focus group was discussing inequality in relative terms. Whether Vietnamese people conceptualize inequality in absolute or relative terms will be examined further in follow-up work underway.

*“The group claimed that the government’s move to increase the salary base at times of inflation only broadened the income gap between the better-off and the poor. Justifying the irrationality of raising the salary base in percentage terms, they cited an example where the increase is 20 percent and the poor with the lower salary will get just some dozens of thousand VND while the better-incomed with the often higher salary base will receive additional millions of VND to their pay.” Site Report from Phuc Xa Ward, Hanoi (better-off residents)*

*“The students claimed that the rich-poor gap over the past five years has been increasingly widened due to the increasing relative gap: the rich develop faster than the poor.” Site report from Linh Xuan Ward, Ho Chi Minh City (student group).*

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**Well Begun, Not Yet Done:  
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