

Economic reforms, household expenditures and poverty in the Mekong River Delta, Vietnam: The economic transition period of 1986-2006

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Abstract

This study is to provide an overview of the economic renovation process started in 1986 in Vietnam and its impact on household expenditures and poverty in the Mekong River Delta, Vietnam using data over a thirteen-year period from 1993 to 2006. A number of results emerges from this study. Firstly, results show that between 1993 and 2006, while the PCE for each household group increases sharply. Especially, this pattern of increasing growth in PCE for non-farming households begins emerging in 1998 and by 2006 their PCEs are higher than that of farming households. Besides, the sharper decline in poverty of non-farm manual work group suggests that the returns to such activities are higher than returns from farm work. Finally, another important result from this analysis is that over this period there has been a sharp reduction in poverty which has not been accompanied by sharp increases in inequality.

Keywords: Vietnam, Mekong River Delta, economic reforms, poverty, inequality.

I. INTRODUCTION

In the 1980s, Vietnam was one of the poorest countries in the world, characterized by economic stagnation and widespread hunger. Over the period 1980-85, gross domestic product (GDP) grew at around 5.2 percent per year. GDP based on purchasing power parity (PPP) per capita (current international dollars per capita) was US\$ 492 in 1985 (IMF 2009) and 70 percent of the country's population was estimated to be living in poverty (Dollar and Litvack 1998, Glewwe et al. 2004). Given this performance, views on the future of the Vietnamese economy were pessimistic and "there was little indication that Vietnamese had any hope of raising their level of welfare" (Glewwe 2004: 1). However, since the late 1980s, this picture has changed. Annual average GDP growth accelerated to 7 percent over the

period 1989-1993 and rose further to an annual rate of 7.6 percent between 1994 and 2006. GDP based on PPP per capita reached US\$ 839 in 1993 and US\$ 2,357 in 2006—approximately four times higher than that in 1985. At the same time, Vietnam experienced a sharp drop in the incidence of poverty which fell from 58 percent in 1993 to 37 percent in 1998, to 29 percent in 2002 and to 15.5 percent in 2006 (GSO 2004b, 2007, 2008). The country, thanks to its high and stable economic growth, has already met the first Millennium Development Goal target of halving poverty by reducing the proportion of people living below the international poverty line (UNDP 2005). These dramatic achievements are largely ascribed to the success of various policy reforms implemented during the course of Doi Moi ('renovation'), a policy which was initiated by the 6th National

Congress of the Communist Party of Vietnam (CPV) in 1986.

In addition to overall economic growth, this period has also witnessed notable changes in agriculture, the sector where Vietnam's program of renovation was initiated (Minot and Goletti 1998). Over the years there has been a change in the structure of GDP with an increase in the share of industry and a decline in agriculture (see Appendix 1.2), showing a clear transformation towards a more industrialized and modernized economy. Country-wide, the share of agricultural employment in the labour force has fallen from 73 percent in 1990 to 55 percent in 2006. Specifically, in rural areas, the percentage of individuals relying on agriculture as their main occupation was 65.4 percent of the rural population (age 15 and above) in 2006 as compared to the 1998 figure of 82 percent. These figures clearly show that over time there is a trend of labour movement out of agriculture and into other sectors. This together with the structural transformation of the GDP reflects an on-going process in which households in the country in general and in rural areas in particular have reallocated their resources to engage in and to earn additional income from non-agricultural sources. In other words, the economic renovation process in Vietnam has been accompanied by a declining reliance on agriculture as a source of income and jobs.

Given its great importance for the Vietnamese economy, this paper provides an overview of the economic renovation process in Vietnam and the impact of this process on household expenditures and poverty in the Mekong River Delta, Vietnam. The first part of this paper describes the selected policies that Vietnam has adopted since the start of the master renovation program, in 1986, while the second one provides a presentation of the macro background of the Mekong River Delta, with a focus on household expenditure and poverty.

The structure of the paper is as follows. The research data is described in section 2, followed by selected policy reforms in section 3. Section 4 provides a background of Mekong River Delta, while section 5 empirically discusses changes in expenditures, poverty and inequality of households in Mekong River Delta. Finally, I deliver some concluding remarks in section 6.

2. Research data

Data for this thesis come from five nation-wide surveys: Vietnam Living Standards Survey (VLSS) 1993, Vietnam Household Living Standards Survey (VHLSS) 2002, VHLSS 2002, VHLSS 2004 and VHLSS 2006 [hereafter called LSMS 1993, LSMS 1998, LSMS 2002, LSMS 2004, and LSMS 2006]. These are nationally representative, high quality surveys with comprehensive and carefully collected data (GSO 2004b, World Bank 1995). Each sample was selected to be representative at the region-level; the sample sizes are large—4,800, 6,000, 30,000, 9,000 and 9,000 households for the LSMS 1993, 1998, 2002, 2004 and 2006 respectively. Interviewers were GSO staff members who were specifically trained to collect data.

All surveys include information on household income sources and expenditure. More particularly, these were collected repeatedly by similar questionnaires in each survey, so they are comparable and, consequently, serve well for depicting and comparing income diversification patterns within and across years of concern. Since the focus of this paper is on understanding the context of rural households in the MRD, a sub-sample consisting of those who live in this region is extracted from each of the five datasets. Specifically, findings in this study are based on 800, 830, 5,079, 1,488 and 1,473 rural households in the MRD drawn from the LSMS conducted in 1993, 1998, 2002, 2004 and 2006 respectively.

In this dataset, total household expenditure is composed of (i) consumption expenditure on food and non-food (nondurable goods), (ii) value of home-product food consumed, (iii) value of goods in-kind received (such as food and housing) beside wages, (iv) estimated used value of durable goods owned by the household, and (v) rental value of the dwelling occupied by the household. Total household expenditure and PCE both are measured at the January prices in each year of the study. The poverty incidence (headcount ratio) used in the empirical analysis is based on the formula proposed by James Foster, Joel Greer, and Erik Thorbecke (FGT) (Foster et al. 1984). The paper relies on general poverty lines defined by the Vietnam GSO to classify households into poor versus non-poor. These lines are derived from internationally accepted methodology and used by the GSO to

estimate the poverty rate in association with LSMS datasets for Vietnam. A general poverty line refers to the level of expenditure needed to satisfy basic nutritional and other needs (2,100 calories plus some basic non-food items). Accordingly, the corresponding poverty line estimated for 1993, 1998, 2002, 2004, and 2006 is respectively 1,160, 1,790, 1,920, 2,100, and 2,400 thousand VND, measured in terms of real per capita expenditure per annum. Inequality in PCE is described by four measures: the expenditure gap between the richest and the poorest quintile, the Gini coefficient, the Theil T, and the Theil L.

3. Selected policy reforms in Vietnam

As mentioned earlier, Vietnam experienced poor economic performance in the mid-1980s and in response to this limited economic progress, the government began executing a comprehensive reform of the economy and society. Officially, the transformation process was initiated by the government at the 6th National Congress of the CPV (1986). With regard to economic reform the main targets were to replace central planning with a socialist-oriented market economy or regulated market economy and to open the economy to the rest of the world. In short, enterprises and households were allowed greater autonomy in producing and trading their products based on market principles. As a consequence of these economic reforms, the private economic sector was legalized and price controls for most goods and services were removed by 1989.

In particular, the first essential policy changes occurred in the rural/agricultural sector. In general, diversifying economic activities in rural/agricultural areas and industrialization and modernization of agriculture have been the two major targets of rural reform. These are still the main points supporting the development process of the farm economy. Specific objectives of interest for rural reform, clarified in Resolution number 10, are to create favourable conditions and environment to develop the production of a variety of agricultural commodities, processing of agricultural products, and provision of agricultural services and development of rural jobs. In other words, these policies are designed to directly and indirectly stimulate the process of income diversification in Vietnam in general

and in rural areas in particular. These objectives were reinforced and further instituted in Decree number 132 of the Government issued in 2000.

In 1987 and 1988, the former system of controlling prices for agricultural commodities was steadily lifted and farmers were no longer prevented from selling surplus products to the non-State market at a price level they were willing to accept. The issuance of Resolution number 10/NQ-TW dated 5th April 1988 on reforming agricultural production management brought about another important change. Agricultural land, which had been united for production in co-operatives, was allocated by the State to rural households who had worked for those co-operatives on the basis of a lease of 15 or more years. Beneficiaries had to pay taxes upon receiving the right to use the plots of land and became owners of the output after tax payment. These changes, together with the removal of many export restrictions in the late 1980s, led Vietnam to become the world's third largest rice exporter in 1992 as compared to being a net rice importer few years prior to the adoption of the renovation (Glewwe 2004, Tang and Yue 2006).

In the 1990s, the agricultural sector continued to experience changes in land management policy and trade policy. The Land Law released in 1993 supported and protected the achievements of reform in agriculture and provided more rights and security to those who had been allocated land. This law stipulated that households and individuals who had been allocated land were authorized to exchange, transfer, lease, inherit, and mortgage their land-use rights. Additionally, the duration of land-use lease was extended to 20 years for annual cropland and 50 years for perennial cropland. In terms of trade policy, the enactment of the 1997 Trade Law relaxed all constraints on internal trading in rice. In 1997, exports were further liberalized and the private economic sector was (the State was already doing so) allowed to export rice directly and in 1999 the private sector received full freedom to import and export rice. Along with others, these reforms led to rice exports of 4.5 million tons in 1999, a significant increase over the less than one million tons exported in 1992 and a dramatic transformation from the position of a net rice import country prior to 1990.

Another important aspect of the policy changes has been the development of a multi-sector

economy. Prior to the renovation, the State sector was considered the epitome of the socialist economy and provided with favourable conditions to develop while the private sector was completely disallowed. This viewpoint was corrected by the 6th Congress of the CPV with an official recognition of private sector and an initial legal infrastructure for it to operate. In addition, foreign enterprises were encouraged to start businesses in Vietnam as one part of the 'open door' policies. Along with the course of renovation, the continuity of the movement towards a multi-sector economy was strengthened and further facilitated by the passage of a series of important laws concerning the framework for domestic and foreign enterprises to operate, including the Enterprise Law (1992, 1999, 2005), and other relevant laws and policies.

In terms of employment, driven by the various institutional changes, there has been rapid growth in employment opportunities in the non-state sector—which encompasses collective-run economic sector, individual-run and smallholder-run sector, private sector, and foreign investment sector (Tang and Yue 2006: 65). Between 1986 and 1994, this non-state sector expanded by seven million individuals, accounting for more than 30 million employees or 90 percent of total working employees in 1994 (Tang and Yue 2006). This sharp absorption helped Vietnam avoid a sizable increase in unemployment which may have occurred due to the sharp reduction in public sector jobs due to restructuring of State-owned enterprises (about 800,000 employees) over this same period (Glewwe 2004).

Of the above-mentioned changes, the Enterprise Law promulgated in 1999 and implemented in January 2000 has particularly significant meaning in the development and formalization of Vietnam's private sector. This law simplified the registration procedure to the absolute minimum such that entrepreneurs may operate any business not specifically prohibited. Registration no longer required the acquisition of a number of licenses and sub-licenses, allowing entrepreneurs to make better use of time and promptly respond to business opportunities. Registration costs were standardized leading to an increase in transparency and reduction in costs faced by entrepreneurs. The law removed the requirement

of minimum levels of registered capital and enterprises were granted greater access to government investment incentives. In general, the implementation of the law led to an ever better business environment than was expected by entrepreneurs. Soon after the passage of the law, in 2000 itself, about 13,500 new enterprises were registered and 300,000 jobs were created. The corresponding figures were 23,000 and 500,000 in 2003.

In terms of social policy, education policy also experienced major changes under the renovation process. In 1989, private schools were legalized. State spending on education increased significantly, from about 1.8 percent of GDP in 1992 to 3.5 percent in 1998 (Glewwe 2004). This investment reported by the Ministry of Education and Training was about 6 percent in 2006 and recently accounted for about 20 percent of the total State budget. A program of increasing net enrollment at different levels of basic education was targeted with a concentration on primary and lower secondary level as well as pupils in remote areas and those belonging to ethnic minorities. Given these policy changes educational performance has improved; for example, each person aged 15-60, on average, spent 7 schooling years in 1993 and 7.7 years in 1998.

A final dimension of policy change has been in the international trade arena. In 1992, a preferential trade agreement was signed between Vietnam and the European Economic Community, while in 1994, Vietnam and the United States re-established diplomatic relations and signed a bilateral trade agreement in 2001. Vietnam became a member of the Association of Southeast Asian Nations (ASEAN) and the ASEAN Free Trade Area in 1995, and the Asia-Pacific Economic Co-operation in 1998. Since 2006, the country has also been a member of the World Trade Organization.

4. A background on Mekong River

Geographically, the Mekong River Delta (MRD) lies in southwestern Vietnam and is a region where the Mekong River approaches and empties into the sea through a network of distributaries. It shares borders with the Southeast region—Vietnam's most dynamic economic zone, including Ho Chi Minh City. It borders Cambodia to the North, the Gulf of

Thailand to the Southwest, and the South China Sea to the Southeast. The MRD is a low-level

plain about three meters above sea level and is criss-crossed by a system of canals and rivers.

Table 1 *Major characteristics of eight regions in 2006*

Region	Population (mill. pers)	Population density (pers/km ²)	Total area (mill. ha)	Agricultl. land (mill. ha)	Forest land (mill. ha)
<i>Vietnam</i>	84.16	254	33.12	9.41	1.44
Red River Delta	18.21	1,225	1.49	0.76	0.12
North East	9.46	148	6.40	0.98	3.55
North West	2.61	69	3.75	0.50	1.77
North Central Coast	10.67	207	5.16	0.80	2.85
South Central Coast	7.13	215	3.32	0.58	1.46
Central Highlands	4.87	89	5.47	1.60	3.07
South East	13.80	396	3.48	1.61	1.25
Mekong River Delta	17.42	429	4.06	2.58	0.36

Source: GSO (2007).

The MRD is considered the most important agricultural producing region of Vietnam. As seen in Table 1, it covers an area of 4.06 million ha (12 percent of Vietnam's area); of which, 2.58 million ha (63.5 percent) is land used for agricultural production, accounting for 27.4 percent of the country's total agricultural land. Annually, the MRD accounts for 51 percent of the country's rice production, 70 percent of fruit production and 80 percent of fish production. Agriculture dominates the region's GDP, accounting for a 43.2 percent share in 2006.

This important region in terms of agricultural production, consists of 12 provinces and one municipality (Can Tho City) and is home to more than 17 million persons—about one-fifth of the Vietnamese population in 2006. Nearly 80 percent of the MRD population lives in rural areas. In 2006, the average population density was 429 persons per square kilometer, approximately 1.7 times higher than that of the country and one-third of that in the Red River Delta (RRD). The region's population has grown at about 1.2 percent per annum in recent years. In 2006, there were more than ten million individuals in the region's labour force.

In terms of ethnicity, there are four races of people living in this region: Kinh, Khmer, Chinese, and Cham. The Kinh people account for more than 92 percent of the population. Of the ethnic minorities, the Khmer are the largest group, accounting for about 6 percent of the region's population, the Cham account for 1.4

percent, and the Chinese for the rest. Across ethnicities, the Kinh and the Chinese experience better living standards than the rest and the Khmer are 'the most economically and socially disadvantaged' group (MDPA 2004).

In terms of education, the LSMS 2006 shows that the MRD does not perform very well as compared to the rest of the country (see Appendix 1.3). According to the table, only 2.1 percent of the population aged 15 years and above has college/university education, while 27.1 percent have "No certificate" and 10.6 percent have never been to school. This may be compared with a no school rate of 8.1 for the entire country, a no certificate rate of 14.5 and a college/university education rate of 4.4 percent.

As a region with a largely agricultural economic base, the highest share of the region's GDP emanates from agriculture. While this share has declined from 58.9 percent in 1996 to 43.2 percent in 2006, agriculture continues to account for the largest share of the region's GDP. Between 2000 and 2005, this sector grew at about 7 percent per annum while industry at 16.2 percent per annum and the services sector at 12.6 percent per annum. The regional economy also experienced an average growth rate of 10.2 percent over this period, a higher rate of growth as compared to the rest of the country over the same period. GDP per capita at constant 1994 prices was about US\$ 432.2 in 2004—a notable increase over the 1996 GDP of US\$ 241.5 (GSO 2004a, 2006b).

As has been widely recorded, the early reforms led to significant economic achievements and poverty reduction in Vietnam (see Table 2). Over 1993-2006, the country experienced a sharp reduction in poverty, from 58.1 percent to 15.5 percent. Sharing this overall trend, the proportion of poor households in the MRD fell from 47.1 percent in 1993 to 13.0 percent in 2006. However, a comparison of the MRD with the RRD, that is, the two biggest deltas in Vietnam, shows that the MRD has experienced a slower rate of poverty reduction as compared to the RRD, suggesting that heavy reliance on agricultural production may have slowed down the performance of poverty reduction in the MRD.

So far, the preceding paragraphs have described the main characteristics of the MRD. The remainder of this section goes on to provide a macro background on income diversification in the region.

The MRD has a long history of rice production. Traditionally, the land-use system in the MRD has been characterized as single floating rice and deep-water rice. While the process of crop diversification may be considered as beginning in the late 1970s (with the introduction of modern high yielding and short duration varieties of rice) it was only in the late 1980s and the early 1990s that the process of diversification picked up pace.

Table 2 *Poverty rates*

Region	1993	1998	2002	2004	2006
<i>Vietnam</i>	58.1	37.4	28.9	18.1	15.5
Red River Delta	62.9	29.3	22.4	12.9	10.1
North East	78.6	62.0	38.4	23.2	22.2
North West	78.6	73.4	68.0	46.1	39.4
North Central Coast	74.5	48.1	43.9	29.4	26.6
South Central Coast	49.6	34.5	25.2	21.3	17.2
Central Highlands	70.0	52.4	51.8	29.2	24.0
South East	32.7	12.2	10.6	6.1	4.6
Mekong River Delta	47.1	36.9	23.4	15.3	13.0

Note: The poverty rates for 2004 were calculated basing on the new poverty line of the Government for the period 2006-2010 converted to price of January 2004 (GSO, 2008).

Source: GSO (1995, 2004, 2007).

Under the renovation program there were changes in land-use rights, liberalization of agricultural prices and the establishment of the agricultural extension network. For example, farmers were introduced to the integrated farming systems of rice + fish/shrimp, fruit trees + fisheries + animal husbandry, crop + livestock, etc., namely, VAC or VACR system (V stands for “Vuon” = fruit tree orchard, A for “Ao” = fish ponds, C for “Chuong” = animal house, and R for “Ruong” = rice field). New high yielding varieties, especially for paddy, were introduced on farms. Other economic reforms, for example, adoption of trade liberalization policies stimulated producers to adjust their production to meet market demand for food variety as well as to reap more benefits. At a macro level, these institutional changes appear to have exerted a clear influence as both sown areas and quantity of agricultural plants, fruit tree, aquaculture and livestock and poultry heads have increased sharply over the period 1990-99 (see Appendix

1.4). In addition, in recent years, the MRD has experienced rapid growth of aquaculture in terms of both farming area and production of catfish regardless of fluctuating output prices, and high capital entry barriers (Anh 2007). The super-profit from catfish farming, say, an average net income of VND 140 million/1,000 m² per 6-8 month duration in 2006 (IFM et al. 2006), is the main motivation for the current ‘boom’ of catfish farming in the region (Dung 2007).

Apart from crop diversification and the development of alternative agriculture related activities, the MRD has also witnessed the expansion of non-farming earning options.

On the back of the unified Enterprise Law introduced in 2000, there has been a sharp increase in the number of officially registered enterprises located within the MRD. Between 2000 and 2002, the number of enterprises increased from 9,837 in 2000 to 10,900 in 2002

and the number of employees working in these enterprises also rose from 244,366 to 309,386 persons between these two years GSO (2007). After 2002, the development of the non-farm sector has continued to strengthen in the region and in 2006 this sector accounted for 15,325 enterprises providing employment for 463,762 workers. These figures do not account for workers in numerous individual non-farm establishments that are not classified as formal enterprises under the Law, whose business employs at least one full-time worker. In 2002, approximately, 900,000 workers in 486,000 units were engaged in these types of enterprises. While in 2006, the corresponding figures were more than 1.2 million workers in 691,000 units. In terms of ownership of these enterprises the bulk of these enterprises were in the private sector and in mid-2002, according to data from the MRD provinces' department of planning and investment, sole proprietorships and limited and joint stock companies accounted for most of these enterprises (78.4 and 12.9 percent of total enterprises respectively); collectives accounted for 5.5 percent, state sector with 1.9 percent and foreign direct investment for the rest (1.3 percent) (Taussig et al. 2003).

These non-farm enterprises operate in a variety of economic sectors and for the most part have little to do with agriculture. According to statistics provided by the Vietnam Chamber of Commerce and Industry in Can Tho, in 2000, trading and repair of motorized vehicles and consumer goods accounted for 53 percent of the total registered private enterprises, followed by manufacturing (34 percent), construction, restaurants and hotels, transport, storage, and communication accounted for 11 percent while agri-based enterprises accounted for the remaining 2 percent (Taussig et al. 2003, Figure 3.6, page 27).

In addition to the broad patterns of diversification within agriculture and the development of non-farm enterprises an additional change that merits attention is migration patterns. In Vietnam, internal migration was limited by legal regulations until it was supported with the loosening of the *ho khau* (the household residence certificates) restrictions (in 1999) and in 2006, the law allowing freedom to reside anywhere in Vietnam—Law on Residential Housing. These institutional changes have encouraged higher

internal migration, especially migration to urban areas since the launch of the renovation policy in the country.

Although data are limited, it is clear that permanent migration out of the MRD has been increasing over time. Over 1984-1989, data from the Population and Housing Censuses show that the number of out-migrants, age 5 and above was 187,126 persons. This figure doubled in the period 1994-1999 (Phan and Coxhead 2007). There have been two major inter-provincial migration flows: the movement of individuals across provinces in the MRD and rural-to-urban flow from the MRD into Ho Chi Minh City (HCMC). According to the data summarized by Phan and Coxhead (2007), migration within the MRD provinces accounts for a 42 to 45 percent share of out-migrants over each of the two mentioned periods while the flow from the MRD to HCMC increased from 24.9 percent in the first period to 38.7 percent in the latter. Recently, the 2004 Vietnam migration survey reported that 29.7 percent and 16.1 percent of the total migrants who are 15 and above in HCMC and the Southeast Industrial Zone of Binh Duong and Dong Nai, respectively, originate from the MRD (GSO and UNFPA 2005a). In addition, in a recent report by GSO and UNFPA (2005b), the regions with the largest outflows to the Southeast—a region with the most dynamic economy and many of the biggest cities in the country—originate from the MRD, North Central Coast, South Central coast and Red River Delta. These individuals migrate in search of work in the non-farm sector in the country's biggest industrial zones.

The existing research does not provide detailed information on migrants from a specific region but provides information at the country level. According to these reports, migration flows from rural to urban area dominate. Migrants are largely young people in their early 20s, have higher education as compared to non-migrants in the rural areas and in terms of their education are comparable to the non-migrants residing in urban areas. They are not in the poorest group of households in their places of origin. Although migrants tend to be males, there is an increasing proportion of females moving to urban and industrial zones. The main reason for migration at the individual level is the search for better income and employment opportunities (reported by 70 percent of the migrants). At a more macro

level, the relaxation of the household registration system and the rapid growth of employment opportunities in big cities are major factors influencing the increasing volume and the patterns of rural-urban migration flows during the economic transformation in the country (GSO 2006a, GSO and UNFPA 2005a, 2005b, UNFPA 2007).

Based on a 2004 survey, UNFPA (2007) finds that 80 percent of migrants had higher current incomes than prior to migration. 48 percent of male migrants and 54 percent of female migrants sent money home. On average, these earnings accounted for 10 percent of total earnings for males and 17 percent for females. Women in the Southeast industrial zones sent back more than a quarter of their income.

Apart from internal permanent migration, temporary migration to work abroad has been observed in the MRD. According to the Ministry of Labour, Invalids and Social Affairs (MOLISA), the export of skilled and unskilled labour has been emphasized as important solutions to increases in employment demand in Vietnam (issued by the Political Bureau in 1998). Every year, over the period 2000-2005, more than three thousand workers have left the MRD to work in foreign labour markets (Minh 2008). Given the increase in intra-country migration and in international migration of relatively educated workers it is quite likely that since the launch of the renovation policy or in particular since the launch of reforms that allowed internal and external migration, transfer incomes may play a role in shaping household incomes and poverty. In fact, according to a vice minister of the MOLISA in a press conference in 2006: “a poor household would successfully escape from poverty in three years later if there is one member engaging in labour export” (Trao 2006).

5. Household expenditure, poverty and inequality in Mekong River Delta over 1993-2006

5.1 Household expenditure per capita (PCE)

Table 3 displays annual PCE conditional on selected household characteristics. The first point to note is the more than two fold increase in household per capita expenditure between 1993 and 2006. The PCE in 2006 is 2,929.1 thousand VND which is about 2.1 times higher than that in 1993. While there are variations across household groups and female headed households experience the lowest increase in expenditure (1.9 times), the notable aspect is that across all groups there is a almost a two-fold increase in expenditure.

In terms of ethnicity, while PCE in Kinh and Chinese households is 1.2 to 1.5 times higher than PCE in ethnic minority households, over time both sets of households experience similar increases in household per capita expenditure.

As far as household size is concerned, it is well known that a lower average level of PCE is associated with larger household size (Deaton 1997). This is also visible in the case of rural MRD. As seen in Table 3, the PCE in small households (1-3 members) is 1.4-1.7 times higher than that in large households (more than 6 members) while that in the medium-sized households is somewhere in between small and large households. Nevertheless, individuals in large households appeared to experience the highest growth in PCE (2.4 times) between 1993 and 2006. Although this may be premature, if one considers the patterns discussed in the previous chapter where larger households (households with a greater quantity of labour) witnessed a greater re-allocation of time to non-farming wage enterprises, their greater than average increase in PCE should not be unexpected.

Table 3 Mean of PCE by selected characteristics, in thousand VND

Variables	1993	1998	2002	2004	2006	'06/'93
All	1,381.9	1,492.6	2,203.7	2,561.6	2,929.1	2.12
Ethnic group:						
Kinh & Chinese	1,428.6	1,520.2	2,260.8	2,594.6	3,003.2	2.10
Ethnic minorities	948.9	1,266.2	1,506.0	2,080.8	1,997.4	2.10
Household size:						
Small (<=3 members)	1,789.7	2,019.8	2,805.5	3,178.6	3,545.0	1.98
Medium (3-6 members)	1,415.0	1,569.8	2,237.6	2,535.2	2,811.6	1.99

Variables	1993	1998	2002	2004	2006	'06/'93
Large (>=6 members)	1,066.0	1,230.5	1,752.0	2,130.3	2,598.4	2.44
Sex of head:						
Male	1,344.4	1,487.0	2,176.4	2,561.3	2,942.6	2.19
Female	1,504.6	1,518.1	2,312.6	2,562.8	2,874.4	1.91
Education of head:						
No schooling	1,138.3	1,320.5	1,797.7	2,136.4	2,272.6	2.00
Primary level	1,359.7	1,427.9	2,092.1	2,409.4	2,735.0	2.01
Secondary level	1,484.1	1,608.8	2,331.2	2,734.4	3,049.1	2.05
Tertiary level	1,585.8	1,984.6	3,287.9	3,496.6	4,219.4	2.66
Occupation of head:						
White-collar jobs	1,902.2	2,249.4	3,074.0	3,655.4	4,332.0	2.28
Sales/services	1,799.6	1,815.0	2,548.6	2,914.9	3,624.5	2.01
Farming work	1,326.9	1,436.0	2,066.2	2,430.5	2,813.2	2.12
Non-farm manual work	1,328.3	1,568.2	2,447.5	2,810.1	2,957.5	2.23
Not working	1,374.9	1,390.2	2,289.3	2,531.7	2,852.4	2.07
N	800	830	5,079	1,488	1,473	

Note: Consumption expenditure is measured in real January 1993 prices.

Source: Author's calculation from the LSMS 1993, 1998, 2002, 2004 and 2006.

In terms of educational patterns and consumption, as may be expected there is a positive association between education level of household head and PCE levels in every sample. Furthermore, though all education groups experience increases in PCE, the increase is highest for the group with the highest level of education (2.7 times). While this is not surprising, the fact that even households where heads have no education or only primary education experience a double increase in consumption, where regardless of education levels there was a movement away from farming to non-farming activities.

Occupation of household heads are divided into five categories—white-collar jobs, sales or services, non-farm manual work, agricultural work, and joblessness. Of these, the first three fall in the category of non-farming occupations. Across different occupational categories we see that households headed by an individual who has a white-collar (non-farming) job experienced the highest increase in PCE (2.3 times), followed by households headed by individuals in non-farm manual jobs (2.2 times). A closer look at the patterns shows that this advantage becomes discernible in recent years (2004 and 2006). Noticeably, PCE in households where heads were involved in farming—the traditional occupation in the region—experience consumption gains which are comparable to the sample average.

The main point emerging from this table in relation to the concern of this paper is that between 1993 and 2006, while the PCE for each household group increases sharply, the growth in PCE for households headed by non-farm manual workers is higher than the average for the sample and indeed in the same range as that experienced by households headed by white-collar workers and higher than that experienced by households headed by individuals engaged in farming. This pattern of increasing growth in PCE for non-farming households begins emerging in 1998 and by 2006 their PCEs are higher than that of farming households.

5.2 Poverty reduction

The proportion of poor households conditional on selected household characteristics is displayed in Table 4 for the period 1993-2006. The first row of this table shows that rural MRD experienced a great decline in poverty over this 13-year period. The head count measure of poverty declined from 48.5 percent in 1993 to 15.3 percent in 2006. Poverty reduction was especially sharp in the period 1998 to 2006 (reduction in poverty of 26.7 percentage points). Between 1993 and 1998 the change in poverty incidence was a relatively modest decline of 6.6 percentage points. This is low as compared to the more recent period but also as compared to poverty reduction in the rest of the country over this same period (see Justino and Litchfield 2003, for example).

The rest of Table 4 describes poverty distribution and reduction across groups of households with different socioeconomic attributes. Levels and changes in the poverty headcount rates vary significantly across ethnic groups. In the rural MRD, ethnic Chinese households accounts for less than one and a half percent of the population and are grouped with the majority (Kinh) and constitute about 90 percent of the population. While both majority and minority groups have experienced a reduction in poverty, it is clear that the majority were more likely to exit poverty as compared to the minority. As shown in the table, the change in poverty incidence was 71.3 percent for the former while it was 43.6 percent for the latter. Within the minority groups, the Khmer dominate and are 'the most economically and socially disadvantaged' group and their poverty is often characterized by either limited land to produce or limited capacity to access better and stable jobs (MDPA 2004).

Consistent with the figures in Table 4 and previous studies there is a strong positive relation between education and poverty reduction (see Glewwe et al. 2002, van de Walle and Cratty 2004, for example). This is clear from the consistent pattern across samples where the rate of poverty reduction is higher amongst households headed by individuals with higher education. For example, the headcount poverty index decreases from 62.6 in 1993 to 26.6 amongst households headed by an individuals with no schooling (a decline of 57.5 percent) while the poverty index declines from 30.4 to below five for households headed by those with the highest education level (a decline of 83.7 percent). While it is clear that households with better-educated heads have experienced larger gains as compared to other households, the sharp poverty reduction experienced even amongst those households who have far lower education level/no education is remarkable.

Poverty distribution and reduction also vary across households conditional on individual

head's occupation. In Table 4, the proportion of poor households is frequently lowest in the group of households headed by someone who is either a white-collar worker or a sales/service worker (declining from 26-29 percent in 1993 to about 4-6 percent in 2006). However, these two types of households constitute a small share of the population and in the case of sales/service workers, a declining proportion of the population. The sharpest reduction in poverty emanates from households headed by individuals who are manual workers in the non-farm sector. This occupation had the highest rate of poverty incidence in 1993 (57.4 percent) which drops sharply to 10.2 percent in 2006, that is an 82.3 percent reduction in poverty over a 13-year period. At the same time the share of the rural population headed by households working in this sector expanded by about three times (6.8 to 20.6 percent). The sharp decline in poverty associated with working in this sector while at the same time the increase in individuals involved in this occupation suggests that demand for workers in such occupations may have outstripped supply during the period under study. While not unimpressive, the share of poor farming households drops from 50.5 percent in 1993 to 18 percent in 2006, a decline of about 64.4 percent. Finally, people who lived in households headed by someone who did not work—for reasons such as illness, retirement, and doing housework, also experienced a reduction in poverty over the period.

These figures, and in particular the reduction in poverty amongst those households engaged in non-farm manual work points at the link between increasing engagement in such work and increases in consumption and consequently reductions in poverty. The sharper decline in poverty experienced by this group combined with the increasing share of non-farm manual work suggests that the returns to such activities are higher than returns from farm work and that the opportunities produced by such enterprises are not restricted to highly educated workers.

Table 4. *Changes in poverty incidence by household characteristics rural MRD*

Variable	^(a) Poverty incidence (P), %					^(b) Change in poverty incidence, %					^(a) Rural MRD population share, %				
	1993	1998	2002	2004	2006	'93-'98	'98-'02	'02-'06	'93-'06	1993	1998	2002	2004	2006	
All	48.50	41.95	26.60	18.76	15.25	-13.50	-36.60	-42.68	-68.56	100.00	100.00	100.00	100.00	100.00	
Ethnic group:															
Kinh & Chinese	45.71	39.71	24.18	17.40	13.13	-13.12	-39.10	-45.72	-71.28	90.25	89.15	92.42	93.58	92.64	
Ethnic minorities	74.36	60.38	56.10	38.65	41.92	-18.81	-7.08	-25.28	-43.63	9.75	10.85	7.58	6.42	7.36	
Household size:															
Small (<=3 members)	33.33	14.83	11.85	10.93	8.99	-55.50	-20.11	-24.13	-73.03	18.75	9.05	14.13	15.60	20.24	
Medium (3-6 members)	44.07	35.90	24.38	18.24	15.93	-18.54	-32.08	-34.65	-63.84	51.63	56.20	62.36	66.12	65.20	
Large (>=6 members)	65.82	58.81	41.35	27.33	20.87	-10.65	-29.70	-49.52	-68.29	29.63	34.75	23.51	18.28	14.55	
Sex of head:															
Male	49.10	42.64	26.97	18.16	14.14	-13.15	-36.75	-47.58	-71.21	76.63	82.03	80.01	80.13	80.21	
Female	46.52	38.80	25.11	21.21	19.74	-16.60	-35.29	-21.40	-57.58	23.38	17.97	19.99	19.87	19.79	
Education of head:															
No schooling	62.59	56.26	40.06	36.81	26.60	-10.11	-28.79	-33.60	-57.50	17.38	12.10	12.85	11.67	11.27	
Primary level	50.45	43.14	28.74	20.66	17.41	-14.49	-33.38	-39.41	-65.48	55.75	60.95	56.48	55.42	52.08	
Secondary level	37.11	37.33	20.96	10.45	10.31	0.59	-43.85	-50.79	-72.20	19.88	19.18	22.72	22.80	25.45	
Tertiary level	30.36	23.07	5.75	6.27	4.95	-24.01	-75.08	-13.83	-83.68	7.00	7.78	7.95	10.11	11.20	
Occupation of head:															
White-collar job	25.93	14.90	7.11	5.95	5.91	-42.51	-52.27	-16.94	-77.21	3.38	3.21	2.80	3.89	4.54	
Sale/service work	28.85	20.74	17.37	14.16	4.47	-28.08	-16.27	-74.25	-84.49	6.50	6.65	0.95	1.25	1.45	
Farming work	50.51	44.86	30.35	20.48	17.99	-11.19	-32.35	-40.72	-64.39	73.50	74.00	62.06	62.12	59.39	
Non-farm manual work	57.41	36.80	19.66	11.14	10.19	-35.89	-46.59	-48.15	-82.25	6.75	7.09	17.95	16.91	20.58	
Not working	48.10	47.45	23.85	23.68	15.19	-1.35	-49.74	-36.32	-68.42	9.88	9.04	16.25	15.83	14.05	
N	800	830	5,079	1,488	1,473										

Notes: ^(a) Poverty incidence and share of population are weighted by household size.

^(b) Change in poverty incidence is defined by $[(Pt-Pt+1)*100/Pt]$.

Source: Author's calculation from the LSMS 1993, 1998, 2002, 2004 and 2006.

5.3 Inequality

While there has been a spectacular decline in poverty over the period of study, especially between 1998 and 2006, what about expenditure inequality? As shown in Table 5, the relatively small decline in poverty between 1993 and 1998 is accompanied by a reduction in expenditure inequality while the more significant decline in

poverty in the period 1998 and 2006 is accompanied by an increase in inequality which is about the same magnitude as the decline in inequality between 1993 and 1998. Different measures in Table 5 capture the same picture. Over 1993-98, the ratio of the mean PCE between poorest and richest households falls from 4.3 to 3.3 while the Gini coefficient falls from 0.295 to 0.235. This result, that is poverty

reduction and a reduction in inequality at the same time, is due to the greater growth in expenditure amongst the lowest quintiles and as discussed in the introductory chapter may be a

result of the sharp increases in rice prices between 1993 and 1998 which led to a relative increase in the welfare of the poorest quintiles.

Table 5 *PCE levels and measures of inequality*

Quintiles	1993	1998	2002	2004	2006
Poorest	614.2	838.7	1,086.2	1,250.8	1,386.8
Poorer	902.2	1,153.5	1,536.6	1,795.8	2,032.2
Middle	1,180.0	1,432.9	1,961.3	2,293.3	2,641.2
Richer	1,546.6	1,820.4	2,595.9	3,050.9	3,479.0
Richest	2,666.2	2,735.8	4,311.1	5,052.5	5,777.7
<i>All</i>	<i>1,381.9</i>	<i>1,492.6</i>	<i>2,203.7</i>	<i>2,561.6</i>	<i>2,929.1</i>
Richest/Poorest (times)	4.341	3.262	3.969	4.039	4.166
Gini coefficient	0.295	0.235	0.276	0.281	0.284
Theil T	0.153	0.091	0.130	0.137	0.144
Theil L	0.142	0.089	0.122	0.128	0.131
N	800	830	5,079	1,488	1,473

Note: Consumption expenditure is measured in real January 1993 prices.

Source: Author's calculation from the LSMS 1993, 1998, 2002, 2004 and 2006.

While there has been an increase in inequality between 1998 and 2006, it is relatively modest and in 2006 expenditure inequality is at about the same level as it was in 1993. Thus, the main story emerging from this analysis of poverty and inequality is that over this period there has been a sharp reduction in poverty which has not been accompanied by sharp increases in inequality. While all occupational groups have experienced increase in consumption, households engaged in non-farming occupations have experienced relatively higher gains in consumption and the largest reductions in poverty.

6. Conclusions

The success of various policy reforms implemented during the course of Doi Moi ('renovation'), a policy which was initiated by the 6th National Congress of the Communist Party of Vietnam (CPV) in 1986, has attracted the attentions from both academics and policy makers. Given this, this paper aims to highlight a number of milestones of the economic renovation process and achievements on household expenditures and poverty in the Mekong River Delta, Vietnam over the aforementioned period. Several findings can be presented as follows. Firstly, results show that between 1993 and 2006, while the PCE for each household group increases sharply, the growth

in PCE for households headed by non-farm manual workers is higher than the average for the sample and indeed in the same range as that experienced by households headed by white-collar workers and higher than that experienced by households headed by individuals engaged in farming. This pattern of increasing growth in PCE for non-farming households begins emerging in 1998 and by 2006 their PCEs are higher than that of farming households. Besides, the reduction in poverty amongst those households engaged in non-farm manual work points at the link between increasing engagement in such work and increases in consumption and consequently reductions in poverty. The sharper decline in poverty experienced by this group combined with the increasing share of non-farm manual work suggests that the returns to such activities are higher than returns from farm work and that the opportunities produced by such enterprises are not restricted to highly educated workers. Finally, the main story emerging from this analysis of poverty and inequality is that over this period there has been a sharp reduction in poverty which has not been accompanied by sharp increases in inequality. While all occupational groups have experienced increase in consumption, households engaged in non-farming occupations have experienced relatively higher gains in consumption and the largest reductions in poverty.

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