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# FINAL REPORT ANALYSIS OF THE P135-II BASELINE SURVEY







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# **FINAL REPORT**

## ANALYSIS OF THE P135-II BASELINE SURVEY

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Vietnam has achieved unprecedented reductions in poverty over the past two decades. The Government has allocated substantial investment resources for development of ethnic minority and mountainous areas – largely targeting at poor households through various policies, programmes and projects. With the close attention of the Government, significant improvements to the socio-economic conditions of ethnic minority and mountainous areas have been achieved, and the povery rate has been decreasing rapidly year after year. However, the 54 officially recognized ethnic groups within Vietnam's diverse society have not shared equally from the benefits of this growth. Poverty, life expectancy, nutritional status, and other living standard measures remain persistently low among Vietnam's ethnic minorities. To address this challenge, the Program 135 Phase II was launched in 2006 as a further step with the aim to radically accelerate the poverty reduction in particular and socio-economic development in the poorest communes of Vietnam. This reflects strong commitment of the Government in support for economic development of the ethnic minorities.

To monitor the progress of the P135-II, the P135-II Baseline Survey (BLS) was implemented to collect information on a treatment group of 266 P135-II communes and a control group of 134 non-P135-II to inform the performance indicators at the onset of the P135-II. All the figures reported are calculated from the BLS. In order to provide most comprehensive picture as possible on poverty of ethnic minorities so that to inform policy makers and especially to assist CEMA on the implementation of the P125-II, this report covers all areas covered by the BLS. The report should be thus considered as an update and comprehensive poverty analysis of ethnic minorities. Further (and more focused) analysis is currently on-going and will be a subject of another publication.

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#### **Research team**

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## LIST OF ABBREVIATIONS

BLS	P135-II Baseline Survey
CEMA	State Committee for Ethnic Minority Affairs
GSO	General Statistical Office
MOLISA	Ministry of Labour, War Invalids, and Social Affairs
SOE	State owned enterprises
P135-I	Program 135 Phase 1
P135-II	Program 135 Phase 2
PMU	Project Management Unit
UNDP	United Nations Development Program
VHLSSs	Vietnam Household Living Standards Surveys
VLSSs	Vietnam Living Standards Surveys
VASS	Vietnam Academy of Social Sciences
WB	World Bank

## THE PROGRAM 135-II AT THE ONSET (2007 FIGURES): AT A GLANCE

	P135-II	Non P135-II	2010 target
ERADICATION OF POVERTY AND HUNGER			
Income-based poverty and inequality			
Poverty headcount (%)	43	37	30
Poverty gap (%)	19	21	
Gini coefficient	0.53	0.44	
Perception on other aspects of welfare			
% lack of food	46.3	39.8	0
% lack of clean water	44.8	40.9	
% lack of medicines	44.7	44.9	
% lack of cash for school frees	32.7	35.01	
AGRICULTURAL PRODUCTION			
Average income per capita/year > 3.5 million/year (%)	37.38	44.47	70
Poor households use market-oriented services			
% of rice traded	13.1	10.3	
% of other food crops traded	25.8	39.02	
% of industrial crop traded	48.7	57.9	
% of fruit crop traded	16.6	31.5	
% household coming to agri. extension centre to have training	20.3	19.3	
% households receiving agri extension staff coming at home	5.3	3.6	
% of household paying for agri extension services	1.3	0.48	
% happy with the quality of the information	89.6	87.5	
INFRASTRUCTURE DEVELOPMENT			
Access to physical infrastructures (%)			
Having transportation roads to villages	66.2	80.1	80
Having public transportation	18.8	28.4	
Having cultural post office	85.3	94.1	
Having small irrigation system	61.3	65.7	80
Having electricity (as alternative for power scheme)	84.6	91.8	100
Having healthcare stations	97.7	93.3	100
Having schools			100
Primary school	78.2	83.6	
Lower secondary school	66.9	75.4	
Upper secondary school	2.3	7.5	
Participation of household in infrastructure projects (%)			
Participation of household in selection meeting (1)	87.71	86.99	
Participation of household in selection meeting (2)	49.25	49.96	
Household agreeing selection of project (1)	98.13	98.47	
Household who voiced their opinions (2)	27.42	31.80	
Household opinion considered to select infrastructure (2)	55.41	56.67	
Satisfaction with the selection of project (2)	84.33	77.82	

Contribution of household to infrastructure project			
Household has contributed to the building of the infrastructure	20.46	37.60	
Household has contributed in cash (%)	9.24	13.66	
Average amount of contribution in cash (1000 Dong)	45.26	45.39	
Household has contributed in labour days (%)	13.34	28.36	
Number of labour days on average	4.59	6.50	
Ownership of infrastructure projects (%)			
Infrastructure projects where communes are investment owner	22.49	43.56	
Commune with ownership encountered problems	32.05	42.86	
% household benefiting from the investment-owned project	39.38	42.20	
Organisation of public bidding			
Organization of public bidding (1)	10.51	25.78	
Household aware of public bidding (2)	20.32	15.71	
Satisfaction with infrastructure project (%)			
Satisfaction with the quality of infrastructure (1)	80.93	84.89	
Satisfaction with the quality of infrastructure (2)	67.52	66.21	
% household benefiting from the infrastructure (1)	46.74	48.11	
Infrastructure projects are useful for the household (2)	84.38	88.69	
CAPACITY BUILDING			
Communes having adequate capacity to manage the implen	nentation o	of a progra	m (%)
Communes with PMU	65.79		
using participatory planning	90.86		100% of
with training plan	76.57		commune/
having with communication plan	80.57		community will
using new reporting format	57.14		nave adequate
Monitoring board qualified	32.27	45.33	manage the
Happy of household with qualification of supervision board	59.47	68.24	implementation
Open treasury account	21.76	35.78	of a program
Infrastructure project with an O&M plan	45.72	47.78	
Village and commune staff provided with appropriate skills a	and knowl	edge (%)	
Duration of training is sufficient	26.04		
Training practical & applicable	63.39		
Quality of the trainers (% good or very good)	61.58		
Supervision team trained before taking their role (2)	25.50	19.82	
Capacity strengthened with community participation (%)			
Organisation of meeting to select project	86.55	80.22	Community
Infrastructure projects monitored by people	81.91	76.00	capacity
Participation of household in meeting (1)	87.71	86.99	strengthened
Participation of household in meeting (2)	49.25	49.96	participation
Detailed financial information made public (1)	52.81	66.67	in supervision
Household received financial information (2)	11.12	10.62	activities.

IMPROVED SOCIO-CULTURAL LIVELIHOODS			
Household access to education (%)			
School enrolment			
Gross enrolment rate at primary level	84.87	83.65	
Net enrolment rate at primary level	77.46	78.68	95
Gross enrolment rate at lower secondary level	62.61	69.53	
Net enrolment rate at lower secondary level	56.1	65.13	75
Gross enrolment rate at upper secondary level	38.41	45.87	
Net enrolment rate at upper secondary level	33.27	40.12	75
Reason for not attending school			
Over aged	37.8	34.71	
Don't like studying	3.43	2.92	
Working	16.69	20.46	
Other reasons	13.64	11.92	
Exemption of tuition fees and school contribution			
Primary level	90.79	92.47	
Lower secondary	80.66	75.69	
Upper secondary	68.71	55.27	
Household access to healthcare services (%)			
% of individual being ill or injured over the past 12 months	5.87	5.97	
Types of healthcare facilities used for medical treatment			
Health centre (hamlet, commune, region)	53.35	50.32	
Hospital (district, province, national, other)	16.48	19.96	
Other facilities	30.17	29.72	
% exempted from health care fees	54.48	49.27	
Having free health care certificates	44.91	40.11	
Having free health care certificates	7.49	6.56	
Household access to other key services (%)			
Water for drinking and cooking			
Piped, bought, filtered spring, and rain water	14.4	9.91	Over 80% of
Drilled well with pump, dug/constructed well, soil wells	45.64	57.87	households use
River, lake, pond and other sources of water	39.97	32.23	clean water
Access to clean water	53 27	56 12	
Source of lighting	00.21	00.12	
Flectricity	72	83	
Battery lamp, resin torch	3	2	80% of
Gas oil kerosene lamos	16	8	households
Other	9	7	have electricity
Types of toilets	Ũ	1	
Flush toilet with sentic tank/sewage nines	5 21	8 82	
Suilabh	2 40	3.07	50% of
Double vault compost latrine	5.62	11 93	households use
Other	86 77	76 18	hygienic latrines
Using legal services	00.11	70.10	95% neonle in
% of household using legal services	24 27	22.2	needs receive
happy with legal services provided	92.06	91.22	the legal
			Services

Notes: (1) refers to commune staff's assessment; (2) refers to households' assessment

#### The Programme 135, phase II (P135-II) and its Baseline Survey

The rapid economic growth experienced in Vietnam during the 1990s and early 2000s resulted in unprecedented reductions in poverty, and the ethnic minority and mountainous areas – where a large percentage of poor households live – have also seen rapid development and poverty reduction. Poverty, life expectancy, nutritional status, and other living standard measures remain persistently low among Vietnam's ethnic minorities, in comparison to other areas. To address this challenge, and to further the support and investment in socio-economic development of communes and villages facing extreme difficulties with a view to gradually narrow the gaps between regions and areas, the Prime Minister issued Decision No. 07/2006/QĐ-TTg dated January 10th 2006 on approval of the Programme for Socio-economic Development of Communes Facing Extreme Difficulties in Ethnic Minority and Mountainous Areas in the 2006-2010 period (for Programme 135 Phase II for short).

The objectives of the programme are: to create rapid changes in production, and accelerate the transformation of the agro-economic structure by linking production to market demand; to sustainably improve the material and spiritual life of ethnic minority people in communes and villages facing extreme difficulties, narrowing the development gaps between ethnic groups and regions in the whole country. The targets are: by 2010, there will be no more hungry households and the number of poor households will have been reduced to below 30%; over 70% of households will have average income per capita of over 3.5 million/year in 2010.

The key components of the Programme are: (1) Project for supporting production development and transformation of the economic structure, and improving the production capacity of ethnic minority people; (2) Project for constructing essential infrastructure in communes and villages facing extreme difficulties; (3) Project for training and capacity-building with an aim to to improve the capacity of local officials for administration and economic development management, and for strengthening the capacity of communities; (4) Policies for supporting social services, improving people's living standards, and legal assistance for raising legal awareness.

To monitor the progress of the P135-II, the P135-II Baseline Survey (BLS) was conducted in 2007 to collect information on a treatment group of 266 P135-II communes and a control group of 134 non-P135-II to inform the performance indicators at the onset of the P135-II. A follow-up survey planned for 2010 will measure changes in these indicators within the treatment and control communes. Therefore, the two surveys will permit to evaluate the progress toward achieving the intended outcomes and impacts of the P135-II. That is why the quality of this study is essential for this two-stage evaluation process. In this regard, we

evaluated the BLS before embarking on informing the initial characteristics of the P135-II communes. We found that the BLS provides a good database on the P135-II and the best database on ethnic minorities available up to date. Most importantly, by exploring the data provided by CEMA on the communes surveyed and the BLS, we concluded that the BLS provides a ground for sound impact evaluation.

The purpose of this report is to establish, as much as possible, values of indicators that reflect the situation of the P135-II communes and households at the onset of the Program. We structured the reported into six chapters. One of this was developed to evaluate the BLS and its implications for our analysis. Five major chapters focused on depicting a poverty profile of the P135-II communes and on the four main components of the Program. All indicators were calculated for both P135-II and non P135-II communes. Within the scope of this report, we mainly focus on the average values. In addition to the average values, we also provided disaggregate results according to five dimensions including ethnicity, gender of household heads, language ability, geographical types of communes, and a regional dimension. However, these disaggregate dimensions are only referred to when most appropriate to keep the report focused and reader-friendly (we did provide all details in tables). It is noted that when calculating indicators, we also calculated standard deviations and carried out statistical tests. These results are however not reported for brevity but provided in tables for the interests of more technical readers.

#### **Poverty Profile of the P135-II communes**

The 135P-II objectives is that by the end of 2010, the poverty rate was reduced to below 30% (using national poverty line) in the targeted communes and to narrow the gaps in living standards among Viet Nam's ethnic groups. Applying the official poverty line of VND 200,000/per capita/month for rural households (as all BLS households live in rural areas), we found that at the time of the baseline survey, 43% of the P135-II households was poor. A substantial gap between the Kinh-Hoa and non Kinh-Hoa was also detected. The poverty rate of the Kinh and Hoa households was 26% while the corresponding figure for ethnic minorities was 51%. Highest incidence of poverty was found for those who spoke no or little Vietnamese language. If the program targets of 'poverty rate below 30% in 2010 in 135P-II communes' and 'reducing the gaps between ethnic groups are to be achieved, the Programme need to ensure a highest pace of poverty reduction per annum, i.e 4% reduction rate per year (2 times higher than the national average 2% target of poverty reduction), and about 8% poverty reduction per annum among ethnic minority groups, for the period of 2008-2010.

Other aspects of wellbeing were also revealed by the BLS. 46% declared that they lacked food over the past 12 months. Of this number, 68% reported that they were not very often in shortfall of foods; while 32% was very often or even always experienced a lack of foods. On average, 45% of the P135-II households lacked clean water for cooking and drinking. In terms of healthcare, 48% of the

P135-II households did not have enough medicines when they were ill or injured. Moreover, 33% of the household interviewed revealed that they were lacking of cash to contribute to school fees. In all of these aspects, ethnic minorities were always found disadvantaged compared to the Kinh and Hoa households. In this context, it is not surprising that more than a half of the P135-II communes expressed their unhappiness with the current level of living standards (i.e. the average rate 53%). More importantly, we stressed that given this 'baseline' poverty profile, achieving the P135-II target of having no hunger-stricken households and a 30% poverty rate by 2010 will be challenging.

#### Labour market, Agricultural Production, and Income Diversification

Engaging in income-generating activities is crucial for household welfare. The BLS showed that 70% of the potentially working age population (6 years old and above) were active in labour market. Notably, the unemployment rate was exceptionally low (i.e. 0.6%). This is partly because the poor living standards in the P135-II made it unaffordable for anyone at the working age not to be involved in income-generating activities. Similar to a typical peasant economy, agriculture remained the source of 86% employment, and the incidence of wage employment (including wage jobs in agriculture) was 16%. However, using the MOLISA's threshold of underemployment (i.e. less than 35 hours/week), we found that 58% of the working people in the P135-II were underemployed, and the poor were systematically more seriously under-employed than the non poor ones. This rate of underemployment is substantially higher compared to the national average of around 20-30% in the period 2001-2004. The fact that most of the labour force was engaged in self employment in their own farms provides an explanation. But this exceptionally high underemployment rate does suggest that most of working people in the P135-II did not have adequate jobs. Indeed, more than half of the labour force (52%) in the P135-II communes appeared to be engaged in multiple-job holding as their first jobs was not sufficient to support families.

As agriculture production was the most important income-generating activities, land endowment is a key factor of household welfare. At the survey time, the P135-II households had on average 17,326m2 of agricultural land (40% for annual crops; another 40% for forestry; 10% for perennial crops; and 10% for the other types of land). Ethnic minority-headed households are better endowed than Kinh-Hoa households (the average landholding of Kinh-Hoa households was about 68% of ethnic minorities'). This is attributable to the dominant role of forestry land in the total household landholding of ethnic minorities. On average, forestry landholding of ethnic minorities was four times larger than that of the Kinh and Hoa. There were also considerable disadvantages of female-headed households as they held only a half of the total landholding of male-headed counterparts.

Agriculture production in the P135-II commune was classified into four main crops, including paddy rice, other food crops, industrial crops, and fruits. On

average, more than a half of total agricultural land was used for paddy rice, about 33% for other food crops, nearly 10% for industrial crops, and the remaining three or four percent for fruit trees. The Kinh and Hoa are not different from ethnic minorities in their concentration on paddy rice (about 54% of total land) but ethnic minorities allocated most of the remaining land for other food crops, while the Kinh-Hoa households allocated equally the remaining for industrial crops and other food crops. There was also a spatial dimension of the pattern of land allocation. The P135-II households in the South concentrated most of their agricultural production on paddy rice (i.e. 74% of the total land), while those in the North used 90% of their land relatively equally between paddy rice and other food crops (i.e. 47% for rice, 43% for other food crops). Differences in land endowment and patterns of land uses suggests that support for agricultural productions should take into account these ethnic and spatial dimensions.

Given the above patterns of land uses, the average yearly crop income of the P135-II households was VND 6.33 millions. As non Kinh-Hoa households concentrated mainly on rice and other food crops, these two crops accounted for 46% and 41%, respectively, of the total crop income, and contributed up to 40% of the total average income earned by ethnic minorities. For the Kinh and Hoa, income from paddy rice and food accounted for nearly 20% of the total average income. Although lands were allocated equally for other food crops and industrial crops (i.e. 19% each), average income from industrial crops are substantially higher than income from other food crops. This could be taken to suggest that for the Kinh-Hoa household in the P135-II, planting industrial trees is more productive than cultivating other food crops.

There is a conventional wisdom that households in the poorest communes produce mainly for their own subsistence. We found that it true for rice production, the most important crop, of ethnic minorities since they traded only eight percent of the rice output. Rice production by the Kinh and Hoa was considerably more market-oriented as 31% of rice output was sold. The Southern P135-II communes were generally more commercialized than those in the Centre or in the North. An average of 61% of rice produced in the South was sold, while rice production in the Centre or the North was mainly for home consumption. However, in terms of other crops, we found that 48% of industrial perennial output was traded, while more than a quarter of other food crops was sold to the market. Notably, most of agricultural crops produced by the P135-II were sold to individual traders. This is in contrast with the non-P135-II communes where the majority of agricultural output was bought by SOEs. There were no recorded figures on trading prices but there is likely a considerable margin between the price levels that the P135-II households received and market prices. This is because SOEs are more likely to benefit from economics of scale in purchasing rice from households. In addition, these SOEs may be influenced by the authorities to ensure reasonable prices for rural farmers.

Agricultural income sources (crops, livestock, forestry, fisheries) accounted for about 60% of total household income, while other nonfarm income sources

(wages, nonfarm enterprises) contributed to nearly 30% of total household incomes. Transfers of all types represent around nine percent of the total average income. Compared the national average in 2006 (based on the VHLSS 2006), the proportion of agricultural income was about 20% higher. This implies that the P135-II households were more reliant on agriculture as their major source of income. There was a marked difference in income diversification across ethnicity. The Kinh and Hoa are found more diversified than ethnic minorities in their portfolio of income-generating activities. The BLS shows that for ethnic minorities, agricultural income sources accounted for nearly 70% of total income, while the other nonfarm income sources contributed for 20%. In contrast, the Kinh and Hoa households earned nearly a half of their income from nonfarm activities and the corresponding figure of agricultural income sources is about 40%.

#### Infrastructure Development in the P135-II

Improvement of infrastructure conditions is one of the four major objectives of the P135-II communes. The focus was given to provide/improve access to roads, schools, healthcare stations, electricity, clean water, irrigation system. We found that the target of 80% of the P135-II communes having access to electricity by 2010 was already achieved at the time of the BLS as 85% the P135-II communes had access to electricity and 82% of them had national electricity grid. In addition, there was only two percent gap between the actual level and the target of 100% communes having a healthcare station by 2010. For the P135-II communes in the South or the coastal or delta communes, this target was already achieved by the time of the BLS. The fact that some targets were more or less achieved before the onset of the Program raises a concern on the design of the Program itself, particularly in selecting priorities for the Program.

Besides access to electricity and healthcare stations, achieving the targets on the other infrastructures is challenging as the gaps between the 'baseline' and the target are considerably high. At the time of the survey, only 66% villages interviewed had car road passing by while the 2010 target is 80%. In terms of irrigation, there is also a 20 percentage point gap between the actual and the target level (the baseline level was 61% and the target was 80% communes having irrigation system). We also observed a big gap between the current rate of 78% and the target rate of 100% communes having schools. It was also evident that schools in the P135-II communes were in poor conditions. Insufficient physical facilities were identified as the most serious obstacle to primary schools in 85% of the P135-II communes. In this regard, the P135-II faces a 'double' challenge of building more schools and improving conditions for existing schools. Poor water supply conditions also represent a challenge for infrastructure support. We found that less than five percent of the P135-II communes had access to piped and filtered water. As a result, the main source of water supply for the P135-II communes was river, lake or pond without appropriate treatment.

#### **Capacity Strengthening and Participation**

One pillar of the P135-II was decentralization. Accordingly, it was assumed that community-driven approaches would help improving resource allocation and implementation of investment projects under the Program. In fact, the participatory process was widely applied in the P135-II infrastructure projects. Based on the information collected from commune staff, participation meetings were organized to select 87% of all infrastructure projects implemented. Interestingly, 88% of the households in the P135-II communes, among which 60% were the poor, participated in these participatory meetings. As a result of these meetings, commune staff revealed that 98% of the participants in these meetings agreed with the selection of the projects. This figure was much higher than that revealed by households (only 84% reported that they were satisfied with the selection of projects). But as these levels were high, it would be taken to suggest no problems in choosing investment priorities. However, implementation of these projects seemed to be quite problematic. Notably, some tasks required by the P135-II implementation guidelines were not followed. Only 10% projects organized public biddings<sup>1</sup>; financial information was not made public in 53% of all projects; 22% having a treasury account for transaction; Operation and Maintenance plan has been put in place in 46% of the implemented projects.

Giving communes 'investment ownership' in the P135-II infrastructure projects was a key result of the decentralization approach. It was targeted that 100% P135-II communes would be investment owners of infrastructure projects by 2010, but communes were the investment owners in only 27% of projects at the BLS time. It implies that the gap of 73% needed to be cleared within the three years or so. In this regard, we consider this target a very ambitious one. For the projects that communes had the investment ownership, the impact of that ownership is subject to further consideration. We found that 67% of the commune-owned projects encountered no problems during the implementation process while the 'owners' was just 55%. But the percentage of households who benefited from the investment projects owned by the commune was five percentage point lower than in the communes that did not own the projects. However, it should be noted that P135-II was still in its early years and normally it takes time for community participation and decentralisation to lower levels to show their effectiveness.

#### **Improved Socio-Cultural Livelihoods**

The P135-II attaches a great importance to the improvement of socio-cultural livelihoods, which are achieved by improving access of poor households to education, healthcare, clean water, electricity and other services. In terms of education, we found a marked gap between gross (net) enrolment rates at all levels in the P135-II and the national average levels based on the VHLSS 2006.

<sup>&</sup>lt;sup>1</sup>The concept of public bidding is used here as opposed to the direct contracting method specified in the Law on Procurement. In the results framework agreed between the Government of Vietnam and the donors, there is also a target on increasing the percentage of works using the public bidding method. Direct contracting is also a bidding modality but it is different from non-public bidding.

For instance, the gross and net enrolment rates at primary schools in the P135-II communes were 85% and 78%, respectively. But the national average rates using VHLSS were 104% and 89%. The gaps of more than 20 percentage points are also reported at secondary schools. In addition, there were considerable gaps between the actual enrolment rates and the targeted level by 2010: a ten percentage point shortfall was reported between the actual and targeted level at the primary level; 12 percentage point gap was found at the secondary level. It should be noted that these gaps existed in the presence of intensive support to the P135-II households in terms of school fee exemption. On average, 91% of primary school pupils were exempted from paying fees and contribution. For higher levels, the proportions of pupils that were exempted from lower and upper secondary schools were 81% and 69%, respectively. It suggests that improving access to education requires much more than financial incentives in terms of fee exemption.

Access to healthcare is as equally important for the poor as access to education. The BLS shows that health centres of hamlets or communes offered the major source of medical treatment for the P135-II households. The use of hospital at district or higher level was not very popular given the average distance from the P135-II communes to these hospital was 39 kilometres. Therefore, the quality of healthcare provided at hamlets or communes is essential to the health conditions of the P135-II communes. The rate of free medical treatment was relatively low (at 55%) compared to the rate of school fee exemption reported earlier. Notably, there was almost no difference in the incidence of free medical treatment between the P135-II communes, which are supposed to be the poorest, and the national average level. This suggests that further exemption of healthcare cost should be provided to P135-II households.

For access to clean water, results found at the household level reaffirm the marked gap between the actual and the targeted incidence of access to clean water reported before at the commune level. The BLS shows only 14% of the P135-II households used piped or filtered water for drinking and the remaining relied on natural sources (river, lake, and pond) or wells, which were generally not subject to any water treatment methods. Using common definition of clean water in Vietnam, we found that only 53% P135-II household had access to clean water, suggesting a gap of nearly 27%. Other aspects of sanitation were also revealed by the survey. On average, only 13% of the P135-II households had one of these three types of hygienic toilets (including septic tank, sewage pipes; pour flush toilet, and suilabh; double vault compost latrine), meanwhile 87% of the targeted households used 'other' types of toilets. The BLS does not provide information on hygienic conditions of these 'other' types. But given they are simple types of toilet facilities, also including 'direct over the water' type, it could be taken to suggest that these 'other' types of toilets are not in good hygienic conditions. In addition, 74% of the P135-II households simply dumped household wastes to any land sites nearby or even directly to river/lakes and none of these household wastes were collected. Given this, we are confident to conclude that the P135-II household lives in poor hygienic conditions. In this

regard, the target of 50% households using hygienic latrines is clearly a big challenge. Unless substantial efforts and investment quickly made, this important target will probably not be secured and this is a likely.

#### **Conclusions and Suggestions**

Our overall impression from the findings in this study is that there is a marked gap between the 'baselines' outcome/output indicators and the targeted levels in 2010. This gap is especially pronounced in terms of access to most basic infrastructure facilities. Given the timeframe of the P135-II, implying a little more than three years left (from the time this BLS was completed in Oct 2007 to the time all targets are to be achieved in 2010), this gap represents an important challenge for the P135-II. We suggest that great efforts be made by ministries, government agencies and local levels in guiding and implementing the programme in a timely manner,. At this stage, we strongly recommend to speed up the progress of the P135-II, especially in terms of building roads, water supply, schools, and improving sanitation conditions for the P135-II communes. Restructuring the Program's budget to give less resource for the targets that were more or less achieved at the time of the survey to the targets that were still lagged behind is necessary. In addition, training activities should be prioritized to build up capacity at commune level so that commune staff would be capable enough to implement the participatory approach and manage the 'ownership' of the P135-II projects and this need to be done quickly.

For the evaluation of the P135-II, given the quality of the BLS, we recommend that the follow-up survey is worth doing. It should be stressed that the BLS is probably the most comprehensive dataset we have ever had so far on ethnic minorities and on poorest communes of the country. Therefore, exploring this survey beyond the scope of this baseline study will potentially help shed lights on aspects that have not been analysed and contribute greatly to providing more facts about the current status and situation of ethnic minority groups and poorest communes in the whole country. There has been a growing literature on widespread poverty and some other aspect of economic wellbeing amongst ethnic minorities but most of the current literature was based on the data available from the VLSSs or VHLSS. Unfortunately, these surveys were not designed to be representative for ethnic minorities and hence the results obtained from exploring these surveys should be thus taken with caution.

In this regard, the BLS provides potentially unique opportunities to make important contribution to our understanding of ethnic minorities in Vietnam. Among numerous possibilities, three key issues for P135-II can be pointed out. First, the BLS provides the unique opportunity to disaggregate ethnic minorities into at least 10 different groups. This could be a research agenda in the next step. Second, the report draws the broad picture of P135-II communes and households' living conditions.We could assess the ethnic income gap, trying to disentangle its components: factor endowment and returns to these factors. For this purpose, the BLS has a unique property: it provides data on different ethnic groups living in poorest communes that are relatively homogenous. This property minimizes the effect of 'unobserved factors' on the welfare gap between ethnic groups. Third, the BLS provides sufficient information to explore in details labour force participation of ethnic minorities and its impact on welfare. The BLS database allows a comprehensive investigation of the factors associated to higher household income diversification, which are the ones that triggers and which one hinders this strategy allowing households to escape poverty.



## INTRODUCTION



"Water Infrastructure Improvement" - Photo: Kieu Van

### **CHAPTER 1 - INTRODUCTION**

The rapid economic growth experienced in Vietnam during the 1990s and early 2000s resulted in unprecedented reductions in poverty. The 54 officially recognized ethnic groups within Vietnam's diverse society have not, however, shared equally from the benefits of this growth (Baulch et al. 2008a). Poverty, life expectancy, nutritional status, and other living standard measures remain persistently low among Vietnam's ethnic minorities. Despite comprising just over one-eighth of the national population, the minorities accounted for about 40 percent of the poor in 2004. Some government agencies forecast that by 2010, the ethnic minorities will constitute more that half of Vietnam's poor population (Baulch et al. 2008b).

Vietnam has a large number of policies and programs specifically designed to assist ethnic minority development. These programs and policies have paid attention to a wide range of socio-economic issues related to ethnic minority development and are targeted in different ways. At the present, the Program 135 Phase II (P135-II) supported by UNDP is among the most important initiatives for ethnic minority development in Vietnam. The P135-II is being implemented from 2006-10. Its major objectives are to eliminate food poor households in the targeted area by 2010; reduce the number of poor households to below 30%; and narrow the development gap between ethnic groups and other regions.

As part of the impact evaluation package, the BLS for the P135-II was implemented by the General Statistical Office (GSO) in 2007, under the authority of the Committee for Ethnic Minority Affairs (CEMA) and with technical assistance from UNDP. The survey consists of a sample of 6,000 households in 400 communes, of which 4,000 households forms a treatment group randomly selected from the P135-II communes and 2,000 households constitute a control group drawn from P135 Phase I (P135-I) communes that are not included in Phase II. As the survey was undertaken one and a half year after the start of the P135-II, it is not strictly a 'baseline'. The survey provides a rich pool of information on the P135-II targeted communes in the early stages of implementation. This could be explored to develop a benchmark for evaluating the impacts of the Program. This report is prepared by the consultants selected by UNDP and CEMA to analyze this 'baseline' survey.

The main purpose of data analysis following the baseline survey is to establish the baseline values for a set of performance indicators. As a similar survey is planned for 2010, the analysis after the follow-up survey will measure changes in the performance indicators within the treatment and control samples. Taken together, the two surveys will permit to evaluate differences in the performance indicators, which will then reveal the impacts of the P135-II. As the output will be mainly used by relevant policy makers, development practioners, and donors, frequencies, tabulations and cross-tabulations (rather than sophisticated data analysis techniques) will be developed to provide a detailed profile of the P135II communes and establish the baseline performance indicators necessary for future evaluation of the Program.<sup>2</sup> It should be noted that statistical tests were employed to evaluate the BLS but these will not be reported in this study for simplicity.

When analyzing the baseline indicators in these sections, in addition to the average levels we will also disaggregate the average values by five different dimensions. First, for ethnicity, the Kinh and Hoa form the Kinh-Hoa group and the remaining ethnic minorities form the ethnic minority group.<sup>3</sup> Second, Vietnamese language ability is selected as the second dimension as Vietnamese language ability of ethnic minorities is a potentially important factor for ethnic integration. We will calculate and analyze the performance indicators according to three levels of Vietnamese language proficiency. Third, gender of household heads could also be an important driver of decision making processes within households, and thus we will consider the performance indicators separately for male-headed and female-headed households. Forth, we take into account geographical characteristics of the P135-II communes (i.e. whether communes are coastal and delta or other types, which include midland or mountainous communes) in the fourth dimension. Finally, the fifth dimension used in analyzing the performance indicators of this report is the regional dimension. To avoid unnecessary complication, we divide the P135-II communes into the North, the Centre, and the South.4

This report is structured as follows: Chapter 1 is the Introduction. Chapter 2 briefly introduces the baseline survey and discusses potential implications of using this survey for formulating a "baseline situation analysis". A focus will be placed on inter alia the sampling procedure, especially the selection of the treatment and control communes. Chapter 3 provides a 'profile' of poverty and inequality the P135-II targeted communes. Chapter 4, 5, 6, 7 shift the focus to the performance indicators that reflect the four components of the P135-II, including (i) production support; (ii) infrastructure development; (iii) capacity building; and (iv) improved socio-cultural livelihoods, respectively.<sup>5</sup> Finally, Chapter 8 offers conclusions, policy implications, and considers suggestions for the follow-up survey (in 2010).

<sup>&</sup>lt;sup>2</sup> The fact that the BLS was implemented in Oct 2007 while the P135-II started in 2006 has an important implication for evaluating the impacts of the Program in the future. As the initial performance indicators are not strictly 'baseline', using these indicators in evaluating will slightly underestimate the impacts of the P135-II. One challenge for the evaluation team in 2010 will be how to access this degree of this underestimation.

<sup>&</sup>lt;sup>3</sup> The use of the term 'minority' in this case is to keep consistent with the recent literature on ethnic minorities in Vietnam (Baulch et al. 2008b). The 'minority' does not imply that ethnic minorities account for minority of the P135-II population. In fact, ethnic minorities accounted for nearly 79% of the total P135-II population.

<sup>&</sup>lt;sup>4</sup> We considered the possibility of disaggregating into the eight eco-geographical regions but such disaggregation complicates the analysis without providing considerable additional insights.

<sup>&</sup>lt;sup>5</sup> As the P135-II was structured in these four major objectives, we found it is most convenient and informative to structure this report according to these four sections.

#### Before embarking on further analysis, it is important to note the following:

First, the report is largely based on average values as analyzing our set of indicators under these five dimensions is very complex and, in some cases, unnecessary. Given this, we only refer to the above disaggregate dimensions in the main text when appropriate. And all results are reported in tables after each chapter for references of readers with attention to such disaggregate details.

Second, it is noted that when calculating indicators, we also calculated standard deviations and carried out statistical tests (to verify whether differences in indicators between P135-II communes and non P135-II counterparts are statistically significant). These results are however not reported for brevity but provided in tables for the interests of the readers who might be interested in this technical issue.

Third, when reading this report it should be bear in mind that we tried to provide as much details on the P135-II at the onset of the Program as possible. In the main text, we only focus on the most important findings. There are lots more included in an exhaustive list of tables after chapters for further references of various stakeholders. These tables provided could be use to formulate other reports that focus on specific issues rather than an overall and comprehensive picture of the P135-II as this report conveys.

Fourth, our analysis is not specifically designed to assess gender biases but we do provide all results by head of household gender. Readers of particular interests on gender issue could infer more from those details. However, our overall impression is that the differences are globally not very widespread and/or big.

Finally, the BLS allows us to disaggregating into eleven ethnic groups. This provides very informative and deep insights on various aspects of ethnic minorities under the P135-II. However, analyzing according to these eleven ethnic groups substantially complicates the analysis. For that reason, we suggest this as a direction for further research using this BLS. However, we do elaborate this point and provide an example in Appendix 3 of this study.



## THE P135-II BASELINE SURVEY



"Work on rice field" - Photo: Kieu Var

## CHAPTER 2 - THE P135-II BASELINE SURVEY

#### Main findings

The BLS provides a good database on the P135-II at the onset of the Program and the best database on ethnic minorities available up to date. Most importantly, by exploring the data provided by CEMA on the communes surveyed and the BLS, it is concluded that the BLS provides a ground for sound impact evaluation.

#### 2.1 The Baseline Survey

The BLS is a first step of the two-stage evaluation process of the P135-II. The ultimate objective of this BLS is to establish the initial characteristics of communes and households before the onset of the P135-II.<sup>6</sup> In the next stage, the characteristics (concerning the outcome variables) need to be compared before and after the Program. This will be the focus of a follow-up survey that is planned for 2010. Since changes before or after the program can not by themselves reveal the potential impacts of the Program (as the outcomes observed may be due to other non-program related factors), there is a need to select a "control" group. The impact of the program can thus be revealed by the "differences in differences" between the "treated" and the "control" group before and after the program. This has important implications for the design of the BLS.

The treatment group of the BLS consisted of 266 (treated) communes, which were randomly drawn from the list of 1,632 targeted communes of the P135-II.<sup>7</sup> This selection also ensures that the treated communes selected spread over all the provinces that are included in the P135-II. Based on the information provided by CEMA to GSO on these communes, it was observed that there were significant differences in population size among the communes. The smallest commune was Te Leng having only 33 persons while the biggest commune was Khanh Binh having up to 23,418 persons. The GSO's survey team noted this heterogeneity and hence raised some concerns on the quality of the secondary data in this list. However, further efforts to check this issue were not pursued as the survey was already completed.

The most difficult task of sampling design for this survey was to find out the method to select communes for the control group. The poor communes that were selected in the P135-II were selected on the basis of the commune's characteristics, including poverty rate, commune infrastructure situation such as access to road, school, health center, electricity and market. In order to construct the control group, it is

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<sup>&</sup>lt;sup>6</sup> It should be noted that the Vietnam Household Living Standards Survey (VHLSS) 2006 was considered for this objective as an alternative to the BLS. However, the content of the VHLSS 2006 does not cover several aspects necessary for evaluating the P135-II. In addition, the VHLSS 2006 only provides information on the 202 P135-II communes (i.e. equivalent to 12% of the total P135-II coverage) (GSO, 2008). <sup>7</sup> This list was selected out of 2,359 communes that have been supported by the P135-I during the period 1998-2005.

necessary to find communes which are as similar to the P135-II communes as possible. In order to do it, the 2,359 P135-I communes were employed. A logistic regression model was adopted to estimate the probability of being selected from these 2,359 P135-I communes into the P135-II.<sup>8</sup> A sub-list of the 724 communes that 'graduated' from the P135-I was then obtained with relevant selection probabilities. From this list, communes with the selection probabilities higher than the average were identified as potential communes for the control group. Based on these, 134 communes for the control group were selected randomly.

Given this sampling procedure, a number of 400 communes (i.e. 266 treated communes in the P135-II and 134 communes of the P135-I but not covered in the P135-II) was identified for the BLS. One village was randomly selected from the list of all villages in each of these 400 communes. This selection method was applied for both control and treatment groups. In each selected village, 15 households were selected for interview. The list of all households in the selected villages, drawn from the Agriculture Census 2006, was provided by the GSO. The simple random method was also applied to select the household at this stage.<sup>9</sup> This process results in a sample of 6,000 households for the BLS. As households were randomly from the 400 communes that were not randomly selected, sampling weights were used to obtained unbiased results reported in this study. The details of calculating sampling weights and how to control for the sample design in the calculation process are briefly described in Appendix 1.

The BLS had a household module and a commune module. The household questionnaire mirrored that of the VHLSS 2006 (see Nguyen and Phung, 2007 for the details of the VHLSS) with two substantial modifications. First, the (sub)sections on expenditures, assets, savings, housing used in the VHLSS were dropped. The content of the remaining sections were simplified to exclude questions that were not relevant to the Program. Second, new sections/questions were added on the participation of the P135-II households in the projects supported by the Program. Similar to the household questionnaire, the commune questionnaire also mirrored that of the VHLSS 2006 with certain modifications. The VHLSS's sections on general information, infrastructure conditions, access to public services (i.e. schools, healthcare services) were simplified. New sections on the projects carried out over the past 12 months at communes, land endowments, nonfarm incomegenerating opportunities were added to the commune questionnaire (GSO, 2008). These two modules were then used to collect the information from the households in the sample during a period going from 4th September to 25th November 2007. Our thorough investigation of the dataset shows that this is a dataset of high quality. Particularly, this is probably the most comprehensive dataset that focuses on ethnic minorities available up to date.

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<sup>&</sup>lt;sup>8</sup>The logistic regression equation models the probability of being selected to the P135-II on a set of the commune characteristics that capture all criteria used by CEMA to select the targeted communes into P135-II such as poverty rates, access to road, electricity, school, and health center (GSO, 2008).

<sup>&</sup>lt;sup>9</sup> Two steps were involved. Firstly, 20 households were randomly selected from the list of all households in each selected village and. Secondly, 15 households out of 20 households were randomly selected from the official list of households for the BLS. The remaining five households were used as the reserve for replacement.

#### 2.2 Evaluating the Baseline Survey

#### The Treatment and Control Groups of Programme 135-II

Given the BLS is the first in the two-stage evaluation process, it is important to evaluate the quality of this survey. As future evaluation will involve comparing certain outcomes between the treatment and control communes across the BLS and the follow-up survey, it is essential to assess whether the control group is an appropriate one. As discussed above, the treated communes were drawn from the 1,632 P135-II communes, which are supposed to be poorer and less well-endowed in terms of infrastructure and public services compared to those not selected for the P135-II. While the controlled group was drawn from the 727 P135-I communes which have upgraded from extreme poverty status after the P135-I, and hence are generally in better socio-economic conditions than those that were re-selected for the P135-II. It is thus expected that these two groups are systematically different.

In order to evaluate this, we obtained secondary data on the 2,359 P135-I communes from CEMA. Table 2.1 shows the communes selected for the P135-II are significantly poorer than those in P135-I not included in P135-II (poverty incidence is 66.2% versus 42.7%, respectively). Likewise, the P135-II communes have smaller population size, are less endowed with schools, electricity, health centers, media station, car roads, total infrastructure and markets compared to the non-P135-II counterparts. In addition, as can be seen in Figure 2.1 representing the kernel distribution of poverty incidence of all 2,359 P135-I communes, the density distribution for the P135-II have not only higher mean poverty incidence but also the distribution is to the right of the P135-I density distribution.

These differences were however mitigated by the sampling procedure as described above. By selecting the 134 controlled communes with higher selection probabilities



Source: CEMA database for sampling design, 2007; authors' calculation.

Figure 2.1: Kernel density distribution of poverty incidence in P135-II and P135-I not in P135-II communes

than the average level obtained from the logistic regression results, the control and treatment communes that were selected for the BLS are similar in every respect except in access to electricity. Table 2.2 reports no statistical differences between control and treatment groups in relevant variables as population size, THE P135-II BASELINE SURVEY

poverty incidence, health center, car roads, irrigation and markets. Similarly, political and cultural inclusion as reflected by the existence of People's Committee house and cultural house shows no differences between the treatment and control communes. In effect, we concluded that the control group and the treatment group had the adequate characteristics from both the point of view of targeting (P135-II area poorer than P135-I communes) and of selecting an adequate control group (the communes in this group has similar probability to be selected in the P135-II and have similar characteristics in a range of pertinent variables).

#### The Treatment and Control in the BLS

The BLS however does suggest partly contradicting results from the above exante story. Table 2.3 compares the treated and the controlled communes using the BLS. It is clear that the treated communes in the BLS are poorer, are less likely to have car roads, electricity, and cultural house than the control communes. These differences are statistically significant. In the remaining variables (population size, school, health centre, irrigation system, markets and media station) the controlled and treated communes are not statistically different.<sup>10</sup> There are at least two potential explanations for these unexpected results. First, there might be some measurement errors in the CEMA database of the P135-II that was provided to the survey team for sampling. Second, if the above is not the case, the quality of the BLS data is then questionable. In our view, we are more in favour the former as the CEMA database was the secondary data reported from the local level (i.e. communal or provincial levels, based on their official data). Compared to the raw data collected from the grass root level of the BLS, given our evaluation of guality of the questionnaires, survey methods, and qualification of the survey team, the CEMA secondary data might be less reliable than the raw data collected in the BLS.

This slightly conflicting result requires an evaluation. In out view, the treatment and control communes generally share the important relevant average characteristics, setting the ground for sound impact evaluation. Such differences should not exert considerable biases in evaluation the impacts of the P135-II. Indeed, in most of the tables produced for this report, the differences in characteristics between the P135-II communes and the controlled communes are not statistically significant (on the basis of the t-test) in more than two third of the total cases. Given this, the remaining sections of this report will produce a detailed picture of the P135-II communes as the initial conditions for the evaluation process using the BLS. As the main focus is placed on an overall picture of the P135-II communes, our analysis will largely concentrate the P135-II communes.

<sup>&</sup>lt;sup>10</sup> It should be noted that all the t-tests performance in this study (except in Table 2.1 and 2.2) took into account the survey design to obtained unbiased test statistics.



## A BASELINE POVERTY PROFILE OF THE P135-II



Build Road" - Photo: Kieu Van

#### At a glance

	P135-II	Non P135-II	2010 target
ERADICATION OF POVERTY AND HUNGER			
Income-based poverty and inequality (%)			
Poverty headcount	43	37	30
Poverty gap	19	21	
Gini coefficient	0.53	0.44	
Perception on other aspects of welfare (%)			
% lack of food	46.3	39.8	0
% lack of clean water	44.8	40.9	
% lack of medicines	44.7	44.9	
% lack of cash for school frees	32.7	35.01	

#### **Major findings**

Applying the official poverty line of VND 200,000/per capita/month for rural households (as all BLS households live in rural areas), we found that 43% of the P135-II households was poor. A substantial gap between the Kinh-Hoa and non Kinh-Hoa was also detected. The poverty rate of the Kinh and Hoa households was 26% while the corresponding figure for ethnic minorities was 51%. Highest incidence of poverty was found for those who spoke no or little Vietnamese language.

If the program targets of 'poverty rate below 30% in 2010 in 135P-II communes' and 'reducing the gaps between ethnic groups are to be achieved, the current baseline information would suggest a pace of poverty reduction of a little more than 4% per annum in the 135P-II communes (2 times higher than the national average 2% target of poverty reduction), and about 8% poverty reduction per annum among EM minority groups, for the period of 2008-2010

Other aspects of wellbeing were also revealed by the BLS. 46% declared that they lacked food over the past 12 months. On average, 45% of the P135-II households lacked clean water for cooking and drinking. In terms of healthcare, 48% of the P135-II households did not have enough medicines when they were ill or injured. Moreover, 33% of the household interviewed revealed that they were lacking of cash to contribute to school fees. In all of these aspects, ethnic minorities were always found disadvantaged compared to the Kinh and Hoa households.

Given this 'baseline' poverty profile, achieving the P135-II target of having no hunger-stricken households and a 30% poverty rate by 2010 will be challenging.

The ultimate goal of the P135-II is by 2010 there are no hunger-stricken households in the targeted areas and the number of poor households drops below 30%. Therefore, it is important to know 'where are we standing' and 'how far we need to go' in order to achieve that goal. This chapter reports a baseline poverty profile of the P135-II communes. It first discusses the use of income as a welfare indicator. The national income poverty line was applied to household income to produce indicators on poverty and inequality in the subsequent two sub-sections.

#### 3.1 Income as a Welfare Measure

It is generally agreed that expenditure is better than income when measuring poverty and inequality. However, welfare levels and the related monetary poverty measurements have been based on net household per capita income in the BLS. This choice was made on two grounds. Firstly, capturing expenditures is a heavy task and needs, in the case of households relying heavily in agricultural production, to take into account seasonal effects, which can be done only through a survey spamming over the whole year. An expenditure module was not included in the BLS since this was considered a too costly option. Secondly, income was preferred to consumption for certain analytical considerations. Since the main aim of the P135-II is to enhance the social and economic environment permitting households to escape poverty, it is crucial to focus on the household's capacity to generate income. In addition, income is more closely connected to conditions in the labor market, which is also expected to be under influence of the Program. In Vietnam, as in many developing countries, labour income is the main source of household income and previous research has shown that rural households' income diversification out of agricultural sector is one the most important strategy to escape poverty (Pham, 2008). Finally, since the outcome variables (reflecting the impact of the P135-II) are expected to attain its anticipated levels in a relative short period (by 2010), it is more suitable to use incomes as the outcome welfare variable instead of consumption, which is often interpreted as a measure of permanent income. Given these considerations, income was used as a welfare measure in this report not only because it was the only choice available but also it represents some relevant properties for the P135-II. However, it does results in one pitfall as it prevents us from making comparison with poverty estimates reported in most of previous research on Vietnam (see Glewwe et al. 2004, for instance).

Calculating income data from the BLS is a complicated procedure that is likely to be encountered by certain measurement errors. Apart from the most common reason that respondents interviewed generally do not provide precise estimates of their incomes, the fact that rural households rely on a diversified portfolio of income-generating activities further complicates this process. Most notably, the income data collected were actually estimates of the households interviewed on their economic activities and there were no tools available for us to check accuracy of these estimates. The income data was thus subject to potential measurement errors. Taking these into account, we have spent considerable efforts to ensure

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these derived figures as precise as possible. However, it should be noted that the income figures should be interpreted with caution. Details of the calculation process are not discussed here for brevity but given in Appendix 2.

#### 3.2 Poverty in the P135-II Communes

A poverty profile of the P135-II communes is constructed based on the most commonly-used indicators, namely poverty headcount index, poverty gap and poverty severity. To ensure that our results of poverty indices would be comparable to the other sources using income as a welfare measure, the income poverty line specified in the Prime Minister's Decision No 170/2005/ QD-TTg (dated July 08, 2005) was used to calculate the poverty headcount. Accordingly, for the period 2006 – 2010, a rural household is considered poor if the per head income per month does not exceed VND 200,000. Using this poverty line, Table 3.1 shows the estimates of poverty for both the P135-II and the controlled nonP135-II on average as well as by ethnicity, gender of household heads, daily language, geography of communes, and regional. Notably, 43% of the P135-II population was poor.<sup>11</sup> There was a substantial difference in the poverty headcount of the Kinh and Hoa-headed households and the ethnic minority-headed counterparts. The poverty rate of the Kinh-Hoa in the P135-II communes was 26% while the corresponding figure for ethnic minorities was as twice as that of the Kinh and Hoa.

Poverty also varied with levels of Vietnamese language proficiency. Those who had no or limited Vietnamese language ability were found amongst the poorest (i.e. 54% of them living under the poverty line). Those who spoke only Vietnamese or both Vietnamese and ethnic minority languages were found similar in terms of poverty rate (i.e. the average poverty incidence was 45%). The gap in poverty incidence was more pronounced when considering other dimensions. Compared to the poverty rate of the P135-II households in the coastal or delta communes, that of the P135-II midland or mountainous communes was 20 percentage point higher. The average gap in poverty rate between the P135-II communes in the North and those in the South was 25 percentage points in advantage of the South.

Figure 3.1 represents the cumulative density function (CDF) of household income in the treated P135-II communes and the non-P135-II ones. The advantage of representing incomes this way is twofold. First, it allows a synthetic display of the whole income distribution and can be easily interpreted in terms of poverty incidence. The intersection between the CDF and the vertical poverty lines reads in the abscise axis as the poverty incidence. Secondly, it allows us to examine whether the conclusions drawn considering the mean poverty lines used. What we found is that moving the vertical line to the right, implying an increase in the poverty line or to the left (a decrease in the poverty line) over a plausible range

<sup>&</sup>lt;sup>11</sup> The income poverty headcount of the non-P135-II was 37%, meaning a six percentage point difference. However, this difference is not statistically significant on the basis of the t-test.

will not change the main conclusion that the P135-II households were slightly poorer than those in the non-P135-II communes but this (point) differences are not statistically significant. Only when comparing both distributions as a whole we find statistically significant differences based on Kolmogorov-Smirnov test.

The figures on poverty gap, which measures the average distance of the poor below the poverty line, provide further insights on poverty of the P135-II communes. On average, the mean aggregate income shortfall of the P135-II households relative to the poverty line was 19%. Notably, the poverty gaps of the Kinh and Hoa-headed households and the minority-headed counterparts are identical. As poverty gap indicates the total resources needed to bring all the poor to the level of the poverty line, this could be taken to suggest that efforts to eliminate poverty across the Kinh-Hoa and the minority in the P135-II communes are not different. A similar story could be inferred when considering the poverty gaps across the three regions.





Figure 3.1 Income cumulative density functions for treated and control households

poverty line to net household income calculated, the BLS also provides selfreported poverty headcount. This poverty rate was based on perception over their living standard by the question of whether a household classified itself as a poor one in the commune. Table 3.2 presents self-reported poverty rates and the distribution of the poor. It is noted that the self-reported poverty rates were relatively close to the rates estimated using our calculated income data and the income poverty line. Using households' perceptions of their living standards, it was found that 51% of ethnic minorities was poor, while 28% of the Kinh and Hoa-headed households considered themselves poor.

An exceptional feature of the BLS compared to the series of the VHLSSs was that the BLS collected information on self-evaluation of households on different aspects of their living standards over last twelve months prior to the survey. Questions asked in the BLS are "Over the last twelve months, did any member of your household experience the following situation: not enough food, not enough clean water, not enough medicine for health, not enough energy for cooking, not enough cash, not enough for paying educational fees for children; any if Yes, what was the frequency?". In addition, the baseline also asked households if they were happy with the current living standards. This information reveals a qualitative side of the poverty profiling in Vietnam which has not been reported elsewhere. Table 3.4 to 3.10 report these non-income aspects of living standards in the P135-II communes.

In the total number of the P135-II households, 46% declared that they lacked food over the past 12 months. Of this number, 68% reported that they were not very often in shortfall of foods; while 32% was very often or even always experienced a lack of foods. The proportions of households with food shortfall varied considerably across ethnic groups, regions, and communes of different geographical characteristics. In terms of ethnicity, while only 33% of the Kinh and Hoa-headed households were lack of foods, the corresponding figure for the ethnic minority-headed households in the P135-II communes was 53%. With respect to geography of communes, the percentage of households having insufficient foods in the midland or mountainous P135-II communes was twice higher than that in the coastal or delta communes. The highest rate of having insufficient food was observed in the Centre (i.e. 56%), while that level was lowest in the Southern P135-II communes (i.e. around 33%).

Other aspects of living standards based on household's perceptions were also reported included their access level to clean water, medicine, and cash to pay for school fees. On average, 45% of the P135-II households was lack of clean water for cooking and drinking. This shortage of water was serious as more than 68% of this percentage reported that very often didn't they have clean drinking water. Availability of medicine was also a problem in the P135-II communes. Our calculated figures reveal that 48% of the P135-II households did not have enough medicines when they were ill or injured. This was also evident that paying for school fees was a burden as 33% of the households interviewed revealed that they were lack of cash to contribute to school fees (in spite of tuition fees and other school contributions were largely exempted in the P135-II communes – see Chapter 7 for more details).

Given the above figures on income and other non-income aspects of living standards in the P135-II communes, it is not surprising that more than a half of the P135-II households revealed their unhappiness with the current living standards (i.e. the average rate 53%) while a third of the total reported that they were 'so so' with the current welfare level. It is noted that the level of satisfaction with the current living standards was not different between the P135-II communes and the controlled non-P135-II counterparts in the BLS's sample.

3

#### 3.3 Income Inequality

Together with poverty reduction, inequality has been receiving growing attention in Vietnam as increase in economic growth is likely to result in disproportionate changes in living standard of different groups, suggesting an increasing inequality. Using the Gini index, one of the most common measures of relative inequality, World Bank (2007) using expenditure per capita reported that the Gini rose from 0.34 in 1993 to 0.35 in 1998 and 0.37 in 2006, showing a modest increase over this period. One of the most commonly mentioned aspects of this growing inequality is the ethnicity inequality. Between 1993 and 2006, Vietnam's national poverty headcount fell from 58.1 to 16 percent, while educational enrolments, life expectancy and other measures of human development increased dramatically. In the same period, the poverty headcount rate among Vietnam's broadly defined ethnic minorities fell from 86.4 to 52 percent between 1993 and 2006. School enrolments, nutritional indicators and life expectancy also remain low among the minorities (VASS, 2007; World Bank 2007). According to Baulch et al. (2008b), the gap in per capita expenditure between the Kinh and Hoa and minority has widened by nearly 15 percentage points between 1993 and 2004. The previous research on inequality in Vietnam has however been based on expenditure. Using income data calculated from the BLS, this section provides another picture of inequality in the P135-II communes.

Table 3.11 shows estimates for some inequality indicators in the P135-II communes, using per capita net income. On average, the Gini coefficient of the P135-II communes is 0.53, while the corresponding figure for the nonP135-II counterparts was 0.44. Though these figures are not comparable to the expenditure Gini reported elsewhere (for instance, VASS, 2007; World Bank, 2007), this implies a high level of inequality observed in the poorest communes of Vietnam. The impact of inequality on economic growth and poverty reduction in the poorest P135-II communes could be complicated as the growth-inequality link is controversial both theoretically and empirically (see Chen and Ravallion, 1997; Dollar and Kraay, 2002 for a review).

Looking at the income Gini estimates for sub-groups of the population, it seems that the Gini coefficient of the Kinh-Hoa was considerably higher than that of ethnic minorities (i.e. 18 percentage point difference). A higher Gini was also observed in the coastal or delta P135-II communes compared to the level of the midland or mountainous counterparts. Finally, there is also a spatial dimension of income inequality as the income Gini was highest in the Southern communes and lowest in the Northern P135-II communes. It is noted that those groups of population (i.e. the Kinh-Hoa; those living in coastal or delta communes; or those living in the South) are generally known as being more likely to benefit from economic growth. Other measures of inequality such as the ratios of 90th percentile to the 10th percentile (p90/p10) or the 75th percentile to the 25th percentile (p75/p25) reveal a largely similar story of inequality compared to that depicted using the income Gini coefficient.

In summary, using income data and the national income poverty line, we found that 43% of the P135-II household were considered poor and there was a substantial difference between the poverty rate of the ethnic minority-headed and the Kinh and Hoa-headed households. It suggests that even in the same poorest communes, ethnic minorities were poorer than the Kinh and Hoa group. The figures on other non-income aspects of living standards such as food sufficiency, access to clean drinking water, medicine, and cash to pay for school fees were evident of poor living standards in the P135-II. Given the situation depicted by the BLS in 2007, the target of having no hunger-stricken households in the targeted areas and the poverty rate below 30% by 2010 is clearly challenging.

3


## LABOUR MARKET, AGRICULTURE PRODUCTION, AND INCOME DIVERSIFICATION



"Local Market" - Photo: Kieu Var

## At a glance

	P135-II	Non P135-II	2010 target
AGRICULTURAL PRODUCTION			
Average income per capita/year > 3.5 million/year (%)	37.38	44.47	70
Poor households use market-oriented services			
% of rice traded	13.1	10.3	
% of other food crops traded	25.8	39.02	
% of industrial crop traded	48.7	57.9	
% of fruit crop traded	16.6	31.5	
% household coming to agri. extension centre to have training	20.3	19.3	
% households receiving agri extension staff coming at home	5.3	3.6	
% of household paying for agri extension services	1.3	0.48	
% happy with the quality of the information	89.6	87.5	

## Major findings

70% of the potentially working age population (6 years old and above) were active in labour market. Notably, the unemployment rate was exceptionally low (i.e. 0.6%). Similar to a typical peasant economy, agriculture remained the source of 86% employment, and the incidence of wage employment (including wage jobs in agriculture) was 16%.

Using the MOLISA's threshold of underemployment (i.e. less than 35 hours/ week), we found that 58% of the working people in the P135-II were underemployed, and the poor were systematically more seriously under-employed than the non poor ones. This rate of under-employment is substantially higher compared to the national average of around 20-30% in the period 2001-2004.

The P135-II households had on average 17,326m2 of agricultural land (40% for annual crops; another 40% for forestry; 10% for perennial crops; and 10% for the other types of land). Ethnic minority-headed households are better endowed than Kinh and Hoa households (the average landholding of Kinh-Hoa households was about 68% of ethnic minorities'). This is attributable to the dominant role of forestry land in the total household landholding of ethnic minorities.

Agriculture production in the P135-II commune was classified into four main crops, including paddy rice, other food crops, industrial crops, and fruits. On average, more than a half of total agricultural land was used for paddy rice, about 33% for other food crops, nearly 10% for industrial crops, and the remaining three or four percent for fruit trees.

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The average yearly crop income of the P135-II households was VND 6.33 millions. As non Kinh-Hoa households concentrated mainly on rice and other food crops, these two crops accounted for 46% and 41%, respectively, of the total crop income, and contributed up to 40% of the total average income earned by ethnic minorities. For the Kinh and Hoa, income from paddy rice and food accounted for nearly 20% of the total average income. Average income from industrial crops is substantially higher than income from other food crops.

There is a conventional wisdom that households in the poorest communes produce mainly for their own subsistence. We found that it true for rice production of ethnic minorities. Rice production by the Kinh and Hoa was considerably more market-oriented as 31% of rice output was sold. In terms of other crops, 48% of industrial perennial output was traded, while more than a quarter of other food crops was sold to the market. Notably, most of agricultural crops produced by the P135-II were sold to individual traders. There were no recorded figures on trading prices but there is likely a considerable margin between the price levels that the P135-II households received and market prices.

This chapter analyzes the allocation of workforce, agriculture production, and other nonfarm income-generating activities by the P135-II households. It first focuses on labour force participation of the P135-II households. The second subsection will place attention to the most important economic activities by those households: agriculture production. Particularly, we will concentrate on land endowment, patterns of land uses, and composition of crop income sources. Commercialization of agriculture production is analyzed in the third sub-section. Finally, we will discuss other income diversification strategies.

## 4.1 Labour Force Participation

The labour market functioning and labour market participation are key issues for the poverty reduction policies. At the micro level, the poor derive the main part of their income from work. At the macro level, labour markets are the major channel through which growth and global macroeconomic conditions affect households' living conditions and poverty. The BLS questionnaires, as similar to these of the VHLSSs, were designed mainly to capture expenditure and income, and the labour market indicators are limited in scope. As a result, it is not possible to measure unemployment or underemployment accurately neither to distinguish between formal sector employment and informal sector employment. Other key information on employment such as social security or information on those working in household businesses is also unavailable. In spite of these shortcomings, we have explored all information available to report some core standard labour market indicators in Table 4.1 to 4.7. These reveal some stylized facts characterizing labour force participation in both the P135-II and the non-P135-II communes. First, the activity rate, defined as the ratio of occupied workers and unemployed over the potentially working age population is relatively high. In the P135-II communes, more than two third of the potentially active population (70%) participated in the labour market during the year previous to the survey. The activity rate is uniform among all kinds of households, including poor and non poor, language spoken at home. Interestingly, the activity rate among the femaleheaded households is just slightly lower than in the male-headed ones (68% vs. 70%). However, the Kinh and Hoa-headed households, those living in costal and delta regions or in the South have significantly lower activity rates than their respective counterparts (around 10 percentage point gap). At the aggregate and most of the levels of disaggregation considered here, the activity rate is statistically not different between the treatment and control groups.

In most of the industrialized countries, as in the case of Vietnam, unemployment is considered as the key indicator to measure the shortage of demand over supply of labour. However, in developing countries where wage relations are limited and the unemployment risk not covered, the unemployment rate is not a good proxy of labour market rigidities. In spite of this analytical pitfall and of the limited reliability of the available data (see above), we will use this indicator. The unemployment rate is extremely low: 0.6% for the treatment group and 0.3% for the control group even if the difference is statistically significant. For all the 80 categories of households considered here, the unemployment rate is always below 3%. The most affected are households in the P135-II communes located in the coastal or Southern regions (2.8% and 2.2% respectively), or headed by female (2.2%). There could be two sources of explanation for this exceptionally low unemployment rates. Firstly, selfemployment in agriculture production remains the main source of employment in Vietnam in general and in the P135-II communes in particular and there are almost no barriers of being engaged in agriculture activities. Therefore, engaging in agriculture is the most obvious and easiest choice for those who want to work. Secondly, it is also likely that as the average living standard in the P135-II communes are too low (see Chapter 3) so that it is hardly possible for anyone at the working age not to be involved in income-generating activities.

More adequate for labour market tensions is probably the underemployment rate. Following international definitions, underemployment is officially defined by MOLISA and GSO as the occupied population working fewer hours than a "normal" threshold (35 hours per week since 2004) and seeking to work more. Table 4.3 reveals that 58% of the working people in the P135-II were under-employed. This rate of under-employment is substantially high compared to the national average of around 20-30% in the period 2001-2004 (GSO, 2004). The highest rate was registered in the Central region (74%), while the lowest was observed in Coastal and delta regions (43%), and the poor was systematically more seriously under-employed than the non poor ones. This exceptionally high rate of underemployment is worrying. Although the activity rates were high and the unemployment rates were low, more than a half of working people were under-employed. The fact that most of the labour force was engaged in self employment in their own farms provides an explanation. But this

exceptionally high underemployment rate does suggest that roughly half of working people in the P135-II communes did not have adequate jobs.

To characterize the employment structure we defined a set of core indicators, based on main job status, industry and institutional sector. Table 4.4 to 4.6 report some stylized facts on the employment structure. Firstly, agriculture was the main source of employment (and hence income), accounting for 86% of the labour force in the P135-Il communes. As expected, this share was significantly higher for poor households, ethnic minorities, mountainous areas and the Northern regions. Female-headed households were more diversified in terms of their participation in the labour market, the agriculture share being lower than male-headed households (78% vs. 87%), compensated by a higher proportion of employment in other nonfarm activities. In this regard, the sample design presents good properties, the control group sharing the same characteristics with the treatment group at quasi all levels of disaggregation. Secondly, the share of wage earners among the labour force was very low, with a mere 16% (compared to the average of 30% at the national level, using the VHLSS 2002 as reported in Pham and Reilly 2008). Such a figure is a classical feature of labour relations at the early stage of labour market development. Even among non-poor households, only 22% of the labour force was wage employed. Third and consistently with previous results, only 6% of the labour force was working outside household businesses and agriculture. This could be taken to suggest that the P135-II communes did not benefit from the high growth of foreign and domestic enterprises that occurred during the last two decades.

Finally, we have computed incidence of multiple-job holding, defined by the rate of people who worked on more than a job over the past 12 months prior to the interview. On average, more than half of the labour force (52%) in the P135-II communes appeared to engage in multiple-job holding. Usually, multiple-job holding reflects non adequate jobs properties, as the main job is not considered sufficient to earn a leaving, and the workers have to look for additional job to complement their income. However, the multiple-job holding rate is difficult to interpret in the BLS, as the questions formulation does not permit to distinguish the ones who are holding two or more jobs at the same time from the ones who were changing job during the year.

In effect, labour market characteristics in P135-II communes present all the classical features of a peasant economy, based on poor traditional activities, non wage relations involving family businesses, intensively mobilizing all the household labour force, the diversification outside agriculture being mainly oriented towards the informal sector. In order to provide further insights on the labour force participation of the P135-II households and its contribution to household income, the subsequent sub-sections will focus on agriculture production (which is one of the four major objectives of the P135-II) and other nonfarm income-generating activities.

## 4.2 Agriculture Production: Land Endowment, Land Uses, and Crop Income

The above figures have shown that agriculture remains the major, and the only in some cases, source of income-generating activities in the P135-II communes. Therefore, this report will place an emphasis on agriculture production in these poorest communes. Household landholding in any aspects is a key factor for agriculture production and hence household welfare. In this study, we divided agriculture lands into (and particularly focus on) three types of land, namely annual crop land, industrial and perennial land, and forestry land together with the total land (meaning taking into account all types of land). Analyses of land holdings would then be conducted based on this classification. Before embarking in further analysis, it should be noted our analyses of land endowment is subject to one caveat: the BLS does not provide information on land quality. Insights on land endowment according land quality are thus not possible.

In Table 4.8 to 4.10, we report the average landholding, number of plots, and composition of landholding for the P135-II households (and the non-P135-II households) with a disaggregation to the different dimensions. At the time of the survey, the P135-II households had on average 17,326m2 of agricultural land, or more than one and a half hectare. Meanwhile, average level for the non-P135-II households was 14,703m2, meaning a difference of 2,632m2, or more than one forth of a hectare (the difference is not statistically significant). Of the total landholding, annual and forestry land adds up more than 80% of the total land areas. Perennial-tree land plays a fairly modest role with nearly 10% of total landholdings. For annual crop land as the most important type of landholding, the average annual crop land of the P135-II communes 7,045m2 or 40% of the average total land.

Considerable variations in the average landholdings were observed across the different dimensions. In general, the minority-headed households appeared to have substantially larger landholding than the Kinh and Hoa-headed counterparts. On average, the minority-headed households in the P135-II communes had an agricultural land area of 19,351 m2, meanwhile the Kinh-Hoa households had only 13,271 m2, meaning a difference of 6,080 m2. This is attributable to the differences in forestry land endowment across the two ethnic groups. While there were no considerable differences in the endowment of annual crop and perennial lands between the Kinh-Hoa and the minority in the P135-II communes, the ethnic minorities were more dependent on forestry as the most important type of household landholding. On average, the forestry landholding of the minority was four times larger than that of the Kinh-Hoa. This difference was more pronounced in the Northern Vietnam which is endowed most of the forest land of the country. That pattern of land endowment was also intact for other non-P135-II communes. In addition, the figures reveal considerable disadvantages of female-headed households: female-headed households held only a half of the total landholding of male-headed counterparts. When landholding is compared across groups according to the language ability, it is not surprised that the group with no or limited Vietnamese language ability having the largest average land area. This is consistent with the above figures on the difference in the total average landholding between the Kinh-Hoa and ethnic minorities.

The overall pattern of agricultural land uses according to four main agricultural activities, including paddy rice, other food crops, industrial crops, and fruits, is reported in Table 4.11 to 4.12. It is notable that land allocation for these four main crops in the P135-II communes was essentially the same as it is for the non P135-II counterparts. On average, more than a half of total agricultural land was used for paddy rice, about 33% for other food crops, nearly 10% for industrial crops, and the remaining three or four percent for fruit trees.

However, breaking these aggregate figures into different dimensions reveals some insights on the pattern of land allocation. In terms of ethnicity, both the Kinh and Hoa-headed and the minority-headed households in P135-II communes allocated about 54% of their land endowment for paddy rice. Apart from rice, the minority-headed households used most of the remaining agricultural land for other food crops, while the Kinh and Hoa-headed households allocated equally the remaining for industrial crops and other food crops. Notably, there is a spatial dimension of the pattern of land allocation. Households in the P135-II communes in the South concentrated most of their agricultural production on paddy rice (i.e. 74% of the total land). In contrast, Northerners allocated 90% of their agricultural land relatively equally between paddy rice and other food crops (i.e. 47% for rice, 43% for other food crops), while less than 10% are used for industrial crops and fruits. The pattern of land uses in the Central is more comparable to the North with roughly a half of total land allocated to rice. But the P135-II communes in the Central were less dependent on other food crops than their Northern counterparts. When that spatial dimension is proxied by geographical types of communes, it is understandable that most of agricultural land of households in the P135-II coastal or delta communes was used for paddy rice, while the midland or mountainous communes were more diversified in their agricultural productions. This implies that agricultural extension services should be provided differently among regions and geographical types of communes, taking into account the patterns of land uses in each region and communes (see Chapter 7 for a discussion on agricultural extension services).

Given the above patterns of land uses, absolute values of crop income are reported in Table 4.14 and the relative importance of these income sources in total household income are given in Table 4.15. It should be noted that crop income sources in this study refer to values of crops, including equivalence for home consumption. On average, the average yearly crop income of the households in the P135-II communes was VND 6.33 millions, while the corresponding figure of the households in the non-P135-II communes are VND 6.59 millions (this difference is not statistically significant).

Examining the incomes figures across ethnicity, language ability, and spatial dimensions reveals further insights on crop income sources of the households living in the P135-II communes. As the minority households concentrated mainly

on rice and other food crops (which account for 54% and 38% of their total land endowment), these two crops were the most important crop income sources (i.e. 46% and 41%, respectively, of the total crop income). These two crops contributed up to 40% of the total average income earned by the ethnic minorities in the P135-II communes. For the Kinh-Hoa households, income from paddy rice and food crops was much less important in their total average income compared to the minority counterparts (i.e. 20% of the Kinh and Hoa's total average income compared to 40% of ethnic minorities). Although lands were allocated equally for other food crops and industrial crops (i.e. 19% each), average income from industrial crops are substantially higher than income from other food crops. This could be taken to suggest that for the Kinh-Hoa household in the P135-II, planting industrial trees is more productive than cultivating other food crops.

In effect, the findings from this sub-section suggest marked differences in patterns of land uses, and compositions of income between the ethnic minority group and the Kinh and Hoa living in the P135-II communes. The minority-headed households were endowed more lands compared to the Kinh and Hoa-headed households and this difference was largely because of the access for the ethnic minorities to forestry. The difference in land endowment had impacts on patterns of crops and hence income from agriculture production. Both the Kinh-Hoa and the minority in the P135-II communes allocated more than a half of their total land for paddy rice. But the ethnic minorities used the remaining half lands mainly for other food crops – by which they were not able to exploit the advantage of forestry land endowment, while the Kinh-Hoa allocated the other half for industrial crops and fruits. As a result, income from rice and other food crops contributed more than 85% of the ethnic minority-headed total crop income while the Kinh and Hoa-headed households were much less reliant on these two crops in their total crop income. The next sub-section will focus on the extent of commercialization of agriculture productions in the P135-II communes.

## 4.3 Commercialization of Agricultural Production

There is a conventional wisdom that households in the poorest communes produce mainly at a subsistence level and hence income generated from selling agricultural products is limited. In this sub-section, we concentrate on the extent that the P135-II households sold their agricultural products to verify this common understanding. Table 4.18 to 4.20 report the proportions of crops traded and the values of trade according to different types of buyers.

As highlighted above, paddy rice was the major crop which accounted for more than half of total landholding and contributed around half of the total crop income. Rice production was however found being mainly used for home consumption. On average, only 13% of the total rice output was sold by households in the P135-II communes. The level of rice commercialization of the Kinh and Hoaheaded households was considerably higher than that of ethnic minorities. While 31% of rice produced by the Kinh and Hoaheaded households was sold, only eight percent of the rice output harvested by the P135-II ethnic minority-headed

households was sold to the market. In comparison to paddy rice, the level of commercialization of fruit crops was slightly higher by approximately three percentage points (i.e. 16 percent), while the level of commercialization of other food crops was found at nearly 25%. Industrial perennial crops were most market-oriented as more than 48% of these cropped were traded. These proportions remain relatively stable when comparing across ethnic groups, language ability, and gender of household heads. The highest level of commercialization was found for the industrial and perennial crops. On average, nearly a half of industrial crop outputs were marketed.

In addition, the above tables reveal that the P135-II communes in the South were generally more market integrated than those in the Centre or in the North of the country. The Southern region is the major bowl for rice export and rice production in the South was more market-oriented than in the other two regions. An average of 61% of rice produced by the P135-II households in the South was sold, while the rice output in the Centre or the North was mainly for home consumption. This was also observed in the nonP135-II communes. For other crops, the level of commercialization of food crops, industrial and perennial crops, and fruits were higher than that level of rice, but the South remained the most commercialized in terms of crop trade.

It should be noted that nearly 90% of paddy rice was sold in the P135-II communes to individual traders. In contrast to the P135-II households, those living in the non-P135-II communes sold the majority of their rice output for state-owned companies (SOEs). There were no recorded figures on the trading prices but it is likely that the margin between the price levels that the P135-II households received are considerably lower than the market prices. This is because of high transaction cost due to the remoteness of these P135-II communes or poor conditions of transportation linking these communes to urban towns/cities. In addition, the prices sold to SOEs in the non-P135-II communes may be higher than these bought by individual traders as SOEs are more likely to benefit from economics of scale in purchasing rice from households. In addition, these SOEs may be controlled or influenced by the authorities to ensure a reasonable price level for rural farmers. In this regards, the P135-II households might have been suffered from selling their products under the market prices. In comparison to paddy rice, the proportions of other food crops and industrial crops to individual traders were lower. However, individual traders remained the major buyers of these crops sold by the P135-II households. And therefore, the above implication on the differences between the prices that the P135-II households received and the market prices are likely to be intact for the other crops.

In effect, the P135-II households had sold an average of one fifth of their agricultural products. This is a low level of commodity production but slightly higher than the commonly expected subsistence level. The BLS does not provide information on the prices that the P135-II received from selling their agricultural products. But as individual traders were the major buyers, it could be taken to suggest a certain margin between the prices that the P135-II received and the respective market prices. In this regard, improving transportation infrastructures

and organizing marketing activities in the P135-II communes are necessary to promote commodity production and reduce that price margin.

## 4.4 Income Diversification

The first sub-section of this section highlighted labour allocation of the P135-II communes to different sectors. In this sub-section, we will concentrate on how these activities had brought income to the P135-II communes. Overall picture of income-generating activities and their contribution to total household income is given in Table 4.24 and 4.25. It should be stressed that there are no considerable differences in terms of total income decomposition of households in the P135-II communes and the other non-P135-II communes. Agricultural income sources (crops, livestock, forestry, fisheries) accounted for about 60% of total household income, while other nonfarm income sources (wages, nonfarm enterprises) contributed to nearly 30% of total household incomes. Around nice percent of the total average income comprised of transfer of all types. And the remaining one to two percents was attributed to other income sources. Compared the income composition of the P135-II households to the average level in rural areas in 2006 (based on the VHLSS 2006), the proportion of agricultural income was about 20% higher in the BLS than that in the VHLSS 2006. This implies that the P135-Il households were more reliant on agriculture as their major source of income, while the national average rural household (obtained from the VHLSS 2006) was more diversified in other nonfarm activities.

The pattern of income diversification was different across the two ethnic groups in the P135-II communes. It was evident that the ethnic minority-headed households were more dependent on agricultural income sources, which accounted for nearly 70% of their total average income, the other nonfarm income sources contributed for 20% while the remaining was attributed to transfers and other income sources. In contrast, the Kinh and Hoa households earned nearly a half of their income from nonfarm activities. Nonfarm income-generating activities contributed up to 48% of the total average income, while the corresponding figure of agricultural income sources is about 40%. On the national average, there has been evidence, using the VHLSS 2004 and other earlier household living standards surveys, that nonfarm diversification is a way out of poverty for rural Vietnam (Pham, 2008). Whether this finding is applicable for the P135-II communes is however not clear. In fact, household can be pushed to nonfarm activities as a coping strategy to provide extra income when agriculture income sources are not sufficient. On the other hand, it is also likely that wealthy households or those with a good stock of social/political capital could invest into nonfarm activities as these are more productive than agricultural production. If the latter is upheld, the reliant of the Kinh and Hoa on nonfarm income sources lends an explanation for the gap in the poverty headcount rates between the Kinh and Hoa and ethnic minorities as discussed in section 3. However, if the former is actually the case in the P135-II communes, the welfare impact of this reliant is difficult to postulate without thorough quantitative investigation.



## **INFRASTRUCTURE CONDITIONS IN THE P135-II COMMUNES**



Road Ungrading under P135" - Photo: Kieu Van

# CHAPTER 5 - INFRASTRUCTURE CONDITIONS IN THE P135-II COMMUNES

## At a Glance

	P135-II	Non P135-II	2010 target
INFRASTRUCTURE DEVELOPMENT			
Access to physical infrastructures			
Having transportation roads to villages	66.2	80.1	80
Having public transportation	18.8	28.4	
Having cultural post office	85.3	94.1	
Having small irrigation system	61.3	65.7	80
Having electricity (as alternative for power scheme)	84.6	91.8	100
Having healthcare stations	97.7	93.3	100
Having schools			100
Primary school	78.2	83.6	
Lower secondary school	66.9	75.4	
Upper secondary school	2.3	7.5	

Notes: as this chapter focuses on communal access to infrastructure conditions, other issues related to infrastructure development projects (as reported in the At a Glance Table at the start of this report) will be discussed in chapter 7.

## Main findings

The target of 80% of the P135-II communes having access to electricity by 2010 was already achieved at the time of the BLS as 85% the P135-II communes had access to electricity and 82% of them had national electricity grid.

There was only two percent gap between the actual level and the target of 100% communes having a healthcare station by 2010. For the P135-II communes in the South or the coastal or delta communes, this target was already achieved by the time of the BLS.

The fact that some targets were more or less achieved before the onset of the Program raises a concern on the design of the Program itself, particularly in setting priorities for the Program. Besides access to electricity and healthcare stations, achieving the targets on the other infrastructures is challenging as the gaps between the 'baseline' and the target are considerably high.

At the time of the survey, only 66% villages interviewed had car road passing by while the 2010 target is 80%. In terms of irrigation, there is also a 20 percentage point gap between the actual and the target level (the baseline level was 61% and the target was 80% communes having irrigation system).

There is a big gap between the current rate of 78% and the target rate of

100% communes having schools. It was also evident that schools in the P135-II communes were in poor conditions. Insufficient physical facilities were identified as the most serious obstacle to primary schools in 85% of the P135-II communes. In this regard, the P135-II faces a 'double' challenge of building more schools and improving conditions for existing schools.

Poor water supply conditions also represent a challenge for infrastructure support. We found that less than five percent of the P135-II communes had access to piped and filtered water. As a result, the main source of water supply for the P135-II communes was river, lake or pond without appropriate treatment.

According to the P135-II, essential infrastructure facilities would be provided to villages in line with population and production planning for improvement of living conditions of the people, production development and income generation. By 2010, over 80% of communes will have transportation roads to villages, small irrigation and power schemes in residential areas; 100% of communes have schools, classrooms and healthcare stations. Using the data from the BLS's commune module, the gaps between the current infrastructure conditions at the communal level and the targeted level are highlighted in this section. It should be stressed that the availability of or access to infrastructure conditions in this section is at the commune level. In this chapter 7, we will concentrate on household access to these infrastructure facilities.

#### 5.1 Basic Infrastructure Conditions

Table 5.1 and 5.2 report the transport conditions in the P135-II communes. On average, 94% of the P135-II communes had car road to the centres of commune and there were no differences between the P135-II and non-P135-II communes in this aspect. The road coverage in the P135-II communes was as high as the level observed using the VHLSS 2006 (based on the VHLSS 2006). However, the road coverage diminishes considerably when moving down to the village level as only 66% villages interviewed had car road passing by. This implies that in order to achieve the target in 2010, substantial investment from the P135-II is needed to build more roads to ensure that an additional 12% of the P135-II villages would have road passing by. With respect to road, the P135-II communes were in poorer conditions compared to the non-P135-II counterparts (where 80% of the number of villages interviewed had car road). Where road to the villages were not available, it took the P135-II households an average of 7.7 km to the nearest road. Quality of road was not asked in the BLS but the information on the number of months the road was usable in a year could be suggestive. The data shows that where roads were available, they were usable during an average of 9.8 months. This could be taken to suggest relatively low quality of roads to villages of the P135-II communes.

Though most of the P135-II communes having roads to the commune centres, only 19% of them had passenger transportation routes passing through. For the majority of 81% of communes having no passenger transportation routes, the nearest distance to passenger transport points was about 15 kilometres. This poor transportation condition lends a possible explanation for the over-reliant of the P135-II households on individual traders to sell their agricultural products (as highlighted in Section 5). Transporting their products to markets or trading enterprises, which are normally located in the commune centres or chief towns, is costly under such poor public transport conditions.

Commune-level access to electricity and sources of drinking water is given in Table 5.3 to 5.6. It is notable that the access to electricity in the P135-II communes was as high as the national average level calculated from the VHLSS 2006. On average, 85% of the P135-II communes had access to electricity and 82% of them had national electricity grid. It means that the target of 80% of the P135-II communes having access to electricity by 2010 was already achieved at the start of the Program. Although it conveys good news for the effectiveness of the Program, it does raise a question on the rationale of setting that target while it was more or less achieved at the starting time of the P135-II.

Compared to electricity access, the drinking water supply was however in poorer conditions in the P135-II communes. In both dry and wet seasons, less than five percent of the P135-II communes had access to piped and filtered water. As a result, the main source of water supply for the P135-II communes was river, lake, pond without appropriate treatment. In addition to these natural sources, drilled or soil wells were found to be the second most important source of water supply. Using the commonly used definition of 'clean water' adopted in a number of poverty update reports by WB and VASS, only 34% of the P135-II communes had access to 'clean' water in dry season, while the corresponding figure in the nonP135-II communes was 58%. Notably, the conditions of water supply varied quite substantially between coastal or delta communes to communes of other geographical characteristics (e.g. midland or mountainous). While water from river, lake, ponds were not used for drinking in the coastal or delta P135-II communes, 63% of midland or mountainous communes used these as the main source of drinking water. As no water from rivers, lakes, ponds used by the P135-II households living in coastal or delta communes, they relied largely on drilled or soil wells as the main source of water for drinking and cooking.

In addition to commune-level transportation conditions, access to electricity and sources of drinking water, the BLS also provides the information on access to other infrastructure facilities. Having post office was found important for household welfare in previous studies on Vietnam (see Baulch et al. 2008b for instance). In this regard, it is important to inform that 85% of the P135-II communes had cultural post offices, and the rates of having post offices were highest in the

<sup>&</sup>lt;sup>14</sup>According to this definition, 'clean water' is here defined based on the internationally commonly-used definition of clean water. Accordingly, clean water includes the following sources: (1) private tap water inside the house, (2) private tap water outside the house, (3) public tab water, (4) water pumped from deep drill wells, (4) water from hand-dug and reinforced wells, (5) rain water, (6) bought water (in tank, bottle,...), (7) small water tank, and (8) water tank.

coastal and delta P135-II communes (i.e. 94% of these communes appeared having cultural post offices). This coverage rate is considerably higher than the national average level obtained from the VHLSS 2006 (which was about 40%, using the VHLSS 2006). In addition, the rate of having post office was higher for the P135-I communes that were included in the BLS as the control group than the P135-II counterparts. Table 5.4 shows that 94% of the communes in the control group had post offices (100% of the coastal or delta controlled communes had post offices). This could be attributable to the implementation of the P135-I in these communes prior to the beginning of the P135-II.

The BLS also provides information on access to irrigation system, which is important for agricultural production. On average, 61% of the P135-II communes reported having irrigation systems. Surprisingly, the coastal or delta communes are not different from other midland or mountainous counterparts in terms of access to irrigation facilities. More importantly, it should be stressed that the coverage of 61% was observed at the time of the BLS (i.e. 2007). This represents a big gap between the current rate of having irrigation systems and the target of 80% the P135-II communes having small irrigation systems by 2010. It suggests that building irrigation systems for the P135-II communes should be considered with priority.

## 5.2 Communal Access to Education and Healthcare Services

Education is widely found in the literature on Vietnam as a crucial factor determining household welfare, labour market participation and earnings (see Glewwe et al. 2004). Access to education services is thus crucial for poverty reduction. Table 5.7 to 5.10 report accesses to different schools in the P135-II communes. On average, 78% of the P135-II communes had primary schools, while the corresponding figure of access to lower secondary and upper secondary schools are 67% and 2%, respectively. The rates of having primary and lower secondary schools were markedly high in the coastal or delta communes (i.e. 100% and 93% respectively). The existence of mixed schools (i.e. primary-lower secondary schools, lower-upper secondary schools) was also common in the P135-II communes (around 28%). Ideally, schools should be separated according to levels of the education system. Such combination is often observed where the number of population and/or investment is not sufficient to support having two separate schools. Given the current incidence of the P135-II communes having schools, we observe a big gap between the current rate of 78% and the target rate of 100%. It suggests that substantial investment from the P135-II will be needed to ensure the target of 100% communes having schools/classes by 2010. There will be a two-year period from now for the Program to build up more schools so that the coverage of primary school would be raised from 78% to 100%. This clearly represents a challenge for the P135-II.

It is noted that the school coverage rates in the P135-II communes, especially the rate of primary school, were lower than the national average level reported on the

basis of the VHLSS 2006 (e.g. more than 95% of rural communes having primary schools). In addition, it is likely that schools in the P135-II communes, which are considered to be the poorest, are generally in poorer conditions compared with those located in other communes. Indeed, it is reaffirmed by the responses of the correspondents on major obstacles to different schools as reported in Table 5.8 to 5.9. At the primary education level, insufficient physical facilities were identified as the most serious obstacle in 85% of the P135-II communes; limited school budget and poor living conditions for teachers were ranked as the second difficulty in 42% of these communes. Notably, 'other reasons or don't know' was the main obstacle for primary education in 28% of the P135-II communes. It was unfortunate that there were no specific questions on 'other reasons or don't know', but our view is that this is likely attributed to low awareness of the poorest on the importance of education. In addition, it is noted that these obstacles are more pronounced in the midland or mountainous P135-II communes than the other coastal or delta ones. At the lower secondary levels, the above tendencies remain unchanged.

Access healthcare service is widely considered as equally important as access to education. Table 5.11 to 5.12 provide insights on the current situation of healthcare services in the P135-II communes. Where healthcare services were not available at the communes, the households in these communes needed to travel an average of 20 kilometres to the nearest health centres. It was set as one target of the P135-II that 100% communes will have healthcare station by 2010. Using the data from the BLS, there was less than two percent gap between the actual level and the target set by the Program. For the P135-II communes in the South or the coastal or delta communes, this target was already achieved by the time of the BLS. It is suggestive for potential inconsistencies in designing the Program. As noted earlier, the BLS was finished in Oct. 2007. It is thus likely that the 'baseline' coverage of healthcare services at the onset of the Program was relatively near the level at Oct. 2007 of 98%.

The BLS does not provide information on the conditions of the healthcare stations found in the P135-II communes. But it is commonly understood that these stations are only equipped with the most essential facilities and basic medicines for popular and simple diseases. Hospitals at the district level or provincial level are expected to provide more complicated medical treatment. However, the average distances from the P135-II communes to nearest district-level or provincial hospitals are respectively 27 and 91 kilometres. These long distances, together with poor transportation conditions as discussed above, represents a considerable obstacle for the P135-II households to have medical treatment needed. The data from the BLS also reveals that nearly 35% of the P135-II communes had people who did not want to use the healthcare services available to them. One relatively common practice in the poorest commune is to use worship rather than formal healthcare services for medical treatment. It was unfortunate that no further questions were ask for what types of treatment they

used as alternative so we cannot be affirmative regarding whether using worship is a major alternative for healthcare stations.

In effect, the data from the BLS reveals that there are important gaps between the current situation and the P135-II target in terms of roads, schools, water supply, and irrigation systems. Given the two-year period from now, it seems that substantial investment and efforts are needed to ensure that the P135-II would meet its target of infrastructure development. Interestingly, we found that the targets of providing access to electricity, cultural post office, and healthcare stations were more or less achieved at the time of the survey. It also suggests potential inconsistency in designing the P135-II as some targets were nearly achieved at the onset of the Program.



## CAPACITY STRENGTHENING AND MANAGEMENT OF PROJECTS



'Rice Field" - Photo: Kieu Van

## CHAPTER 6 - CAPACITY STRENGTHENING AND MANAGEMENT OF PROJECTS

## At a Glance

	P135-II	Non P135-II	2010 target
MANAGEMRNT OF INFRASTRUCTURE PROJECTS			
Participation of household in infrastructure projects (%)			
Participation of household in selection meeting (1)	87.71	86.99	
Participation of household in selection meeting (2)	49.25	49.96	
Household agreeing selection of project (1)	98.13	98.47	
Household who voiced their opinions (2)	27.42	31.80	
Household opinion considered to select infrastructure (2)	55.41	56.67	
Satisfaction with the selection of project (2)	84.33	77.82	
Contribution of household to infrastructure project			
Household has contributed to the building of the infrastructure	20.46	37.60	
Household has contributed in cash (%)	9.24	13.66	
Average amount of contribution in cash (1000 Dong)	45.26	45.39	
Household has contributed in labor days (%)	13.34	28.36	
Number of labor days on average	4.59	6.50	
Ownership of infrastructure projects (%)			
Infrastructure projects where communes are investment	22.49	43.56	
owner		10.00	
Commune with ownership encountered problems	32.05	42.86	
% household benefiting from the investment-owned project	39.38	42.20	
Organization of public bidding (%)	10 51	05 70	
Organization of public bidding (1)	10.51	25.78	
Household aware of public bidding (2)	20.32	15.71	
Satisfaction with infrastructure project (%)			
Satisfaction with the quality of infrastructure (1)	80.93	84.89	
Satisfaction with the quality of infrastructure (2)	67.52	66.21	
% household benefiting from the infrastructure (1)	46.74	48.11	
Infrastructure projects are useful for the household (2)	84.38	88.69	
CAPACITY BUILDING			
Communes having adequate capacity to manage the implem	entation o	f a program	
Communes with PMU	65.79		
using participatory planning	90.86		100% of
with training plan	76.57		commune/
having with communication plan	80.57		have adequate
using new reporting format	57.14		capacity to
Monitoring board qualified	32.27	45.33	manage the
Happy of household with qualification of supervision board	59.47	68.24	implementation
Open treasury account	21.76	35.78	of a program
Infrastructure project with an O&M plan	45.72	47.78	

CAPACITY STRENGTHENING AND MANAGEMENT OF PROJECTS

Village and commune staff provided with appropriate skills	and knowle	dge	
Duration of training is sufficient	26.04		
Training practical & applicable	63.39		
Quality of the trainers (% good or very good)	61.58		
Supervision team trained before taking their role (2)	25.50	19.82	
Capacity strengthened with community participation			
Organisation of meeting to select project	86.55	80.22	Community
Infrastructure projects monitored by people	81.91	76.00	capacity
Participation of household in meeting (1)	87.71	86.99	strengthened
Participation of household in meeting (2)	49.25	49.96	participation
Detailed financial information made public (1)	52.81	66.67	in supervision
Household received financial information (2)	11.12	10.62	activities.

### Main findings

One pillar of the P135-II was decentralization. Community-driven approaches were supposed to help improving resource allocation and implementation of investment projects under the Program. In fact, the participatory process was widely applied in the P135-II infrastructure projects. Based on the information collected from commune staff, participation meetings were organized to select 87% of all infrastructure projects implemented. 88% of the households in the P135-II communes, among which 60% were the poor, participated in these participatory meetings.

As a result of these meeting, 98% of the participants in these meetings agreed with the selection of the projects. This figure was much higher than that revealed by households (only 84% reported that they were satisfied with the selection of projects). But as these levels were high, it would be taken to suggest no problems in choosing investment priorities. However, implementation of these projects seemed to be quite problematic. Notably, some important tasks required by the P135-II implementation guidelines were not followed. Only 10% projects organized public biddings; financial information was made public in 53% of total projects; just 22% having a treasury account for transaction; Operation and Maintenance plan has been put in place in 46% of the implemented projects.

Giving communes 'ownership' in the P135-II infrastructure projects was a key result of the decentralization approach. It was targeted that 100% P135-II communes would be investment owners of infrastructure projects by 2010, but communes were the investment owners in only 27% of projects at the BLS time. It implies that the gap of 73% needed to be cleared within three years or so. In this regard, we consider this target a very ambitious.

There is a wide consensus nowadays that a participatory approach gives more insights into the living conditions of the poor and allows most effective policies to be identified (Cling et al. 2003). This approach aims at enhancing the ability of the poor to effectively influence public decisions affecting their lives. Behind the principles that the P135-II put forward, it was implicitly assumed that community-driven approaches to planning, managing, operating and maintaining basic rural infrastructures would help improving poverty targeting of program resource allocation. In addition, it could lead to enhanced fiduciary transparency and accountability in project implementation and to increased sustainability of the project. But these benefits are conditional on the community's capacity to carry out the entire process from consultation of the targeted population, definition of the project, implementation and financial management, to operation and maintenance. This is the reason why capacity-building is a key component of the P135-II. As targeted by the P135-II, 100% of communes should have adequate capacity to manage the implementation of a program by 2010. In addition, villages' and communes' staff will be provided with skills and knowledge on administration, poverty reduction, raising legal awareness, financial management and operational management. Community capacity will also be strengthened with community participation in supervision of investments and other activities.

This chapter provides an overview of the situation in the P135-II communes according to these objectives. We will rely on different indicators related to the scope and limitations of training programs which have been implemented, the actual management capacity of the communes (especially commune staff) in the first sub-section. Using the self-reported perceptions of commune staff, we will assess aspects related to management of the P135-II infrastructure projects and the situation of 'ownership' of the P135-II projects in the subsequent subsections. We will try to make a first diagnostic to what extent a community-driven approach has an influence on the results. In the final sub-section, perceptions of households will be used to re-evaluate the above issues. It should be noted that the BLS survey provides just one picture of the situation at a given time but does not yet allow a real impact evaluation.

## 6.1 Human Resources, Training Activities

In order to draw an overall picture of the situation in the P135-II communes and to assess the needs in terms of capacity building, we will begin with a quick look at the level of education of the commune staff. Unfortunately, the BLS does not allow us to know the qualifications of all commune staff, as only some of them were interviewed. While in some communes, there were only one or two respondents, in some other communes, the number of respondents was up to ten people. Therefore, it is difficult to ensure the representativeness of the information gathered, especially if we want to make a comparison amongst communes. Given this, we focus on the qualifications of the chairman and the vice-chairman of communes (for whom we have information almost for each commune). Table 6.1 reveals that in 25% of the P135-II communes, the key commune staff had no degrees. This rate in the P135-II communes was slightly higher than that of the non-P135-II counterparts (i.e. 18%) but this difference is not statistically significant. The majority of the P135-II commune staff had finished colleges (38%) while few of them had obtained university degrees (nearly ten

percent). The level of educational attainment was quite high compared to the national average. But it is understandable as the commune staff in the P135-II communes are usually those with highest qualifications.

With respect to training activities, Table 6.2 reveals that 55% of the respondents had attended training courses organized under the P135-II in the last 12 months. These figures must be taken with caution as we cannot ensure to what extent the respondents were representative of the commune staff. But according to their declaration, eight persons per commune, on average, had attended training courses of the P135-II, and among them, six are members of the CSBs and/or PMUs. The average duration of the last training courses was seven days, and this duration was considered by the majority of the respondents as not sufficient. Three guarters of them felt that a longer duration for the training would be more appropriate. 64% of the respondents found the training courses practical and applicable to their work (Table 6.3), and 62% revealed that the trainers were qualified. But even if the majority of respondents seemed to have a positive appreciation of the quality of the training courses, it should be noted that 50% of the respondents in the coastal and delta regions, and 50% in the Southern areas were not satisfied with the relevance of the training. In addition, a half of the respondents in the Northern areas were not convinced with the gualification of the trainers.

In other words, it seemed that most of the key commune staff had sufficient educational qualification to manage the P135-II projects but further trainings, especially those designed with a focus on project management and application of participatory approach, would probably be needed.

### 6.2 Management of Infrastructure Development Projects

This sub-section analyzes how the P135-II infrastructure projects were actually implemented and managed in the P135-II communes. Most of the P135-II communes have effectively implemented the main prerequisites for the management and planning of the Program. But the percentage of those who did not yet follow implementation guidelines cannot be neglected. Table 6.4 shows that 66% of villages have established a Project Management Unit (PMU) for managing daily activities of the P135-II projects. It implies that nearly one third of the P135-II communes did not have separate PMUs to manage the Program's activities (this was the case for 66% of the communes in coastal and delta areas, and 72% in Southern regions). For the communes where the PMUs have been established, the implementation of participatory planning was widespread (this practice was observed in 91% of the communes), 77% had a training plan and 81% had a communication plan. However, the new reporting format seemed not to be considered yet as a standard since only 57% of the communes used this new format (Table 6.5). On average, general reports as well as financial reports were submitted at least quarterly. Participatory monitoring activities under P135-Il were also implemented regularly. On average, there were six participatory monitoring reports in a year.

The importance of the P135-II in the target communes should be emphasized as in more than two third of the communes the Program was one of the three main support programmes. Among the infrastructure projects implemented in the past 12 months in the P135-II communes interviewed, 17% concerned village roads, 15% were to build new schools, 15% were to build new commune roads, and nine percent focused on new irrigation systems. Apart from investment initiatives that focused on schools, which was the joint objectives of different programmes, the P135-II project seemed to be more concentrated on developing commune and village roads and irrigation system than the other non-P135-II projects (Table 6.8). This investment priority is relevant given poor transportation conditions and access to irrigation in the P135-II communes as noted in section 5.

Regarding the implementation of the infrastructure projects under the P135-II, the BLS provides a mixed picture, especially compared to the other non-P135 projects. The BLS shows that the participatory process was effectively applied. The organization of meetings to select projects appeared more systematic than in the other non-P135 projects (87% compared with 80% for the non-P135 projects, in particular in mountainous areas and the Northern regions, but it was not the case in the south and in coastal and delta regions) (Table 6.9). According to the estimates by the commune staff, 88% of the households in the P135-II communes, among which 60% were the poor, participated in these participatory meetings. The percentage of participation by the poor was significantly higher for the P135-II projects compared to the other non-P135-II projects, especially in the Northern regions and in coastal and delta areas (Tables 6.10 and 6.11). Furthermore, decisions seem to be taken unanimously as 98% of the participants in these meetings agreed with the selection of the projects, according to the commune staff (Table 6.12).

But on the reverse, some other specific tasks required for the management of P135-projects, according to the implementation guidelines, were not fulfilled or followed. Most notably:

- Public biddings to select the contractor were less frequently organized in the P135-II projects (only for 10% of the projects vs. more than 25% for the non-P135 projects) (Table 6.13);
- The survey reveals that detailed financial information was made public less often than for the non-P135 projects (in 53% of the P135-II cases, compared with more than 60% for the non-P135 projects) (Table 6.14);
- A large majority of the P135-II projects were monitored by the people (in general, 82% compared with 73% for the non-P135 projects in the P135-II communes, the difference was significant except for the Northern regions). It should be noted that while communities were more involved in the P135-II projects, the qualifications of the monitoring board appeared to be lower than for non-P135 projects (Table 6.15 and 6.16);
- An Operation and Maintenance plan (O&M plan) has been put in place in 46% of the implemented projects. For this part of the management process, there was no significant difference between the P135 projects and other non-P135 ones (Table 6.17);

 The commune opened an account in the treasury for the infrastructure only for 22% of P135 projects (compared with 33% of cases for non-P135 projects in the P135-II communes) (Table 6.18).

In spite of these shortcomings, the level of satisfaction by the commune staff with the quality of the infrastructure development projects was quite high. Table 6.19 shows that the commune staff reported to their satisfaction with 80% of the P135-II projects, though this percentage is lower compared to 88% for other non-P135 projects in the P135-II communes. In addition, according to the commune staff, 47% of the P135-II households benefited from the infrastructure development projects. A similar rate of satisfaction was also evident for the poor households in the P135-II commune. This finding is quite worrying as it implies more than a half of the households in the targeted communes did not benefit from the infrastructure projects. However, it should be noted that the average percentage of beneficiaries from the P135-II projects was higher than that of the other non-P135 projects in the same P135-II communes (Table 6.20 and 6.21). This result is encouraging as the P135-II projects were specifically designed to target the poorest.

Regarding the contribution of communes and household (in cash/kind or in working days) to the P135-II infrastructure projects, Table 6.23 and 6.24 show that these contributions represented a small percentage of the total value of the projects. On average, the contribution of communes represented only 14% of the total amount invested and most of these contributions were from the households living in the communes. In addition, the relative importance of the contribution of communes and households to the P135-II projects was significantly lower than to the non-135-II projects (contribution made by communes and households accounted for nearly 30% of the total investment). This is however understandable as the major beneficiaries of the P135-II were considered the poorest in the country.

In short, we found in this sub-section that the P135-II infrastructure projects had been managed quite effectively. Voices of the households in the targeted communes, especially voices of the poor, were heard in the selection process to identify priorities for the P135-II investment. Though contribution made by households and communes to the P135-II infrastructure projects was limited, it was likely to encourage participation of beneficiaries to monitoring activities of the projects chosen. However, several aspects need to be enhanced in order to ensure an effective implementation of the P135-II projects, especially the uses of bidding procedure, and other budget management practices.

## 6.3 Ownership of P135-II Investment Projects

As the community-driven approach was put forward in the P135-II, characteristics of the infrastructure projects for which the commune was the "investment owner" deserves specific attention. The first remark concerns the low percentage of the "commune-owned" P135-II projects. Table 6.25 shows that it was the case for

only 23% of the P135-II projects compared with 45% for the non-P135-II projects in the P135-II communes. In most of the cases (i.e. around 90%), communes were investment owners of the projects when they were the main financing institutions. When the projects were mainly financed by the district authorities or those at higher levels, the commune was investment owner for only 25% of the projects implemented (the corresponding figures for the projects financed by the provincial or central governments were 29% and 38%, respectively). It should be noted that the average value of projects was twice or three times higher when the main financing institution was the authorities at the district, province or the central levels (Table 6.26). This lends a possible explanation for the low incidence of district (province/central) funded projects that was 'owned' by communes as the investment scale of those projects compared to those owned by communes renders it difficult to leave these at hands of commune staff. Compared to the target of having 100% of communes that are investment owners of infrastructure projects, it implies that the gap of 77% needed to be cleared within the next three years or so. In this regard, we consider this target unrealistic given the current situation revealed by the BLS.

The impact of owning projects is likely to be controversial. We expected that owning projects would give the commune authorities autonomy in planning and implementing the projects. Therefore, the projects would best meet the need of the community. In addition, as ownership also implies direct responsibilities of the community to the projects, we expected that the projects would be better monitored. However, these advantages are conditional as they can be realized if the communal authorities are capable enough in planning and managing the project implementation processes. If such management capacity is not available, owning projects may results in problems. In fact, most of the commune staff considered that it would be better when the communes were investment owner of projects (Table 6.27). On average, 97% the commune staff interviewed favoured this option rather than the projects owned by the authorities at higher administrative levels. Indeed, the BLS suggests that owning the P135-II projects were not so problematic for the commune staff. We found that 67% of the commune-owned projects encountered no problems during the implementation process while the corresponding figure for the projects where the P135-II communes were not the 'owners' was just 55% (Table 6.28). According to the management staff, only 12% of the communes that owned the P135-II investment projects had to face problems while allocating budget. But this situation was not significantly different from the projects where communes were not the owners (Table 6.29).

Nevertheless, if we compare the percentage of households benefiting from the infrastructure projects in the investment-owned communes and non investment-owned communes, the picture is mixed (Table 6.31 and 6.32). For the P135-II communes, the percentage of households who benefited from the investment projects owned by the commune was slightly lower (39%) than in the communes that did not own the projects (44%). A similar finding was found for the poor. The gap was not significant at the aggregate level but the survey revealed that it was more pronounced in the Northern region (32% of the poor in the investment-owned

communes vs. 42% of the poor in the non investment-owned communes). On the contrary, in the Southern region, when the communes were investment owner of the projects, households benefit more from the projects (65% of households and 57% of the poor) compared with the case when communes were not (32% of households and 26% of the poor). Management capacity of the commune staff could be an explanation for this difference between the North and the South as it was reported earlier that qualifications of the commune staff are lower in the Northern regions compared to those in the South.

In summary, we found that the target of 100% communes as investment owners of infrastructure projects unrealistic by 2010 as the current rate was only 23%. In addition, the evidence on impacts of 'owning' projects tend to suggest that households benefited less from the investment projects owned by the commune, and some communes that owned infrastructure projects had to face problems in the implementation process. This is because potential benefits of owning projects are conditional on management capacity, which was not sufficient in the P135-II communes.

## 6.4 Perceptions of Households on Project Management

In the previous sub-section, the analysis on the management issues related to the P135-II projects were based on the evaluations and views of the commune staff interviewed. These could be objective as they were directly involved in daily management of the P135-II projects. The BLS provides an opportunity to confront the assessment made by the commune staff with the perceptions of households on the same issues, through comparison of figures must be taken with caution as the households' knowledge on the projects is likely to be limited compared to that of the commune staff. In addition, given the BLS household questionnaire, households were supposed to report on a more restricted list of the infrastructure projects than the commune staff. Bearing these in mind, we will the extent households share the views and evaluation of the issues related to project managements of the commune staff.

Regarding the participatory process, the information provided by the households interviewed generally reaffirms the effectiveness of this approach in project management. On average, nearly 60% of households reported that participatory meetings were organized to select the P135-II projects in their villages (Table 6.34). Nevertheless, it appeared that poor households and ethnic minorities were less informed on the organization of these meetings (respectively, 54% and 57% of them were aware of these meetings). The BLS reveals that the rate of participation of households in the participatory meetings was lower compared with the figures reported by the commune staff. Only 50% of households had attended these meetings (Table 6.35). A higher level of participation was found in the Northern regions (57%). This participation rate was lower in the Southern regions (26%), coastal and delta areas (33%), and the sub-group of households who spoke absolutely no or little Vietnamese (43%). It should be stressed that according to the information provided from the BLS household module, the

organization of meetings was more frequent and participation was significantly higher for the P135-II projects than for the non-P135-II projects in the P135-II communes.

The percentage of households who voiced their opinion provides further insights on the participatory meetings. Table 6.36 shows that only 27% of the participants expressed their views during the meetings. Particularly, the poor seemed to be much less active in contributing their views at the participatory meetings (only 17% of the poor expressed their views at the meetings). Furthermore, only 55% of households perceived that their opinions were considered by the authorities or the commune staff (50% of the poor and 48% of the households who spoke absolutely no or little Vietnamese). In this regard, the participation process seems to be more effective in the non-P135 projects as 76% of households felt that their views were taken into account for the selection of the project (Table 6.37). In fact, the implementation of an efficient participatory process could be time-taking as individuals may have some difficulties to voice their opinions and to make them heard, in particular if they are not used to this type of exercise. Therefore, the participation rates and the rates of expressing views amongst participants at the participatory meeting are encouraging. As a result of this participation, 84% of the households interviewed reported that they were satisfied with the selection of projects (a rate of 87% was found among the poor). It should be noted that the level of satisfaction was higher in the P135-communes compared with the non-P135 counterparts (Table 6.38).

The contribution of households for the construction of infrastructures constitutes another form of participation. Table 6.39 shows that only 21% of the households interviewed reported that they had contributed to the P135-II projects and the same level of contribution was observed for the poor in the P135-II communes. This rate was markedly lower than that in the non-P135-II communes (the corresponding figure in the non-P135-II communes was 38%). This could be explained by the fact that the P135-II communes were considered to be the poorest. In addition, the P135-II had been started for less than two years prior to the BLS. Therefore, the rate of contribution by the P135-II communes could be lower than in the non-P135-II, where the P135-I were implemented over a long period of time. In monetary terms of contribution, each household have paid an average of VND 50,000 in cash (the contribution rate of the poor was at VND 30,000) and have spared 5 working days for the P135-II projects (Table 6.40 and 6.41).

As regard the organization of public bidding, the information provided by the households interviewed was slightly different from that reported by the commune staff (Table 6.42). According to the former, this procedure was put in place for 20% of the P135-II projects; this figure was twice higher compared with the one given by the latter. Furthermore, as public bidding enhances the financial transparency, this figure is suggestive that project management activities were more transparent for the P135-II projects than for the non-P135-II projects (where public bidding occur for only 10% of the cases). But this result must be taken

with caution as the commune staff expressed the opposite point of views. As said above, households might be less aware of the management procedure. However, it does not necessarily mean that their feedbacks are less reliable than those by the commune staff. As highlighted earlier, we cannot ensure to what extent the respondents are representative of the commune staff as the number of the commune staff interviewed markedly varied from one commune to another. But regardless sources of information (i.e. either from households or communes), the situation was far from being satisfactory as the incidence of having public bidding was very low. Similarly, the degree of disseminating financial information was also limited as only 11% of the household interviewed revealed that had received detailed information on the P135-II projects (Table 6.43).

The low incidence of public bidding and dissemination of financial information may be related to the effectiveness and qualifications of the PMUs. The survey revealed that only 25% of the PMU members attended training courses before taking their supervision (Table 6.45). This could be taken to suggest low qualifications of the PMU staff and this is consistent with our analysis at the beginning of this section. It was however surprised that more than 60% of the P135-II households were satisfied with the overall qualification of the boards (Table 6.46). It might be attributed to the fact that managing the P135-II projects requires mainly operational skills and knowledge of the communes and people. This does not require high educational attainment levels. Therefore, it would be possible that while the educational qualifications of the PMU staff were low, they were experienced in enough in managing the project activities.

Finally, when we consider outcome indicators, the level of satisfaction of households for the quality of the P135-II infrastructure projects was largely the same as that of the commune staff. On average, 68% of the P135-II was happy with the quality of the infrastructure built under the P135-II projects (Table 6.47). In this regard, there were neither no significant differences between the P135-II and non-P135-II projects nor the sub-groups of the population. Besides, households expressed no doubts on the necessity and usefulness of the infrastructure projects as 84% of them (and 87% of the poor) revealed that that they had benefited from the P135-II projects (Table 6.48). This result is apparently encouraging as it reflects the importance of the P135-II for the socio-economic development of the poorest communes in the country.

In summary, it was found in this sub-section that perceptions of the P135-II households were quite different from those by the commune staff. The rates of having meetings to select projects, participation of households in these meetings revealed by households were lower than those reported by the commune staff. These differences should be taken with caution as households were generally less aware of the P135-II projects than the commune staff. In addition, using perceptions of households also provide further insights on management issues of the P135-II projects. Notably, the low incidence of public bidding and dissemination of related financial information of the P135-II projects is noteworthy.



# IMPROVED SOCIO-CULTURAL LIVELIHOODS



"Children Game" - Photo: Hoang Trung

# CHAPTER 7 - IMPROVED SOCIO-CULTURAL LIVELIHOODS

## At a Glance

		Non	
	P135-II	P135-II	2010 target
IMPROVED SOCIO-CULTURAL LIVELIHOODS			
Household access to education			
School enrolment			
Gross enrolment rate at primary level	84.87	83.65	
Net enrolment rate at primary level	77.46	78.68	95
Gross enrolment rate at lower secondary level	62.61	69.53	
Net enrolment rate at lower secondary level	56.1	65.13	75
Gross enrolment rate at upper secondary level	38.41	45.87	
Net enrolment rate at upper secondary level	33.27	40.12	75
Reason for not attending school			
Over aged	37.8	34.71	
Don't like studying	3.43	2.92	
Working	16.69	20.46	
Other reasons	13.64	11.92	
Exemption of tuition fees and school contribution			
Primary level	90.79	92.47	
Lower secondary	80.66	75.69	
Upper secondary	68.71	55.27	
Household access to healthcare services			
% of individual being ill or injured over the past 12 months	5.87	5.97	
Types of healthcare facilities used for medical treatment			
Health center (hamlet, commune, region)	53.35	50.32	
Hospital (district, province, national, other)	16.48	19.96	
Other facilities	30.17	29.72	
% exempted from health care fees	54.48	49.27	
Having free health care certificates	44.91	40.11	
Having free health care certificates	7.49	6.56	
Household access to other key services			
Water for drinking and cooking			Over 80% of households use clean water
Piped, bought, filtered spring, and rain water	14.4	9.91	
Drilled well with pump, dug/constructed well, soil wells	45.64	57.87	
River, lake, pond and other sources of water	39.97	32.23	
Access to clean water	53.27	56.12	
Source of lighting			80% of households have electricity

Electricity	72	83	
Battery lamp, resin torch	3	2	
Gas, oil, kerosene lamps	16	8	
Other	9	7	
Types of toilets			
Flush toilet with septic tank/sewage pipes	5.21	8.82	50% of households use
Suilabh	2.40	3.07	hygienic latrines
Double vault compost latrine	5.62	11.93	
Other	86.77	76.18	
Using legal services			95% people in needs
% of household using legal services	24.27	22.2	receive the legal services
happy with legal services provided	92.06	91.22	

#### Main findings

In terms of education, marked gaps between gross (net) enrolment rates at all levels in the P135-II and the national average levels based on the VHLSS 2006 are observed. The gross and net enrolment rates at primary schools in the P135-II communes were 85% and 78%, respectively, while the national average rates using VHLSS were 104% and 89%. The gaps of more than 20 percentage points are also reported at secondary schools.

There were considerable gaps between the actual enrolment rates and the targeted level by 2010: a ten percentage point shortfall was reported between the actual and targeted level at the primary level; 12 percentage point gap was found at the secondary level. These gaps existed in the presence of intensive support to the P135-II households in terms of school fee exemption. On average, 91% of primary school pupils were exempted from paying fees and contribution. For higher levels, the proportions of pupils that were exempted from lower and upper secondary schools were 81% and 69%, respectively. It suggests that improving access to education requires much more than financial incentives in terms of fee exemption.

Access to healthcare is as equally important for the poor as access to education. The BLS shows that health centres of hamlets or communes offered the major source of medical treatment for the P135-II households. The use of hospital at district or higher level was not very popular given the average distance from the P135-II communes to these hospital was 39 kilometres. Therefore, the quality of healthcare provided at hamlets or communes is essential to the health conditions of the P135-II communes. The rate of free medical treatment was relatively low (at 55%) compared to the rate of school fee exemption reported earlier. Notably, there was almost no difference in the incidence of free medical treatment between the P135-II communes, which are supposed to be the poorest, and the national average level.

For access to clean water, results found at the household level reaffirm the marked gap between the actual and the targeted incidence of access to clean water reported before at the commune level. The BLS shows only 14% of the P135-II households used piped or filtered water for drinking and the remaining relied on natural sources (river, lake, and pond) or wells, which were generally not subject to any water treatment methods.

Other aspects of sanitation were also revealed by the survey. On average, only 13% of the P135-II households had one of these three types of hygienic toilets (including septic tank, sewage pipes; pour flush toilet, and suilabh; double vault compost latrine), meanwhile 87% of the targeted households used 'other' types of toilets. The BLS does not provide information on hygienic conditions of these 'other' types. But given they are simple types of toilet facilities, also including 'direct over the water' type, it could be taken to suggest that these 'other' types of toilets are not in good hygienic conditions. In addition, 74% of the P135-II households simply dumped household wastes to any land sites nearby or even directly to river/lakes and none of these household wastes were collected.

Given this, the target of 50% households using hygienic latrines is clearly a very big challenge. Unless substantial efforts and investment quickly made, this important target will not be secured and this is a likely.

The P135-II attaches a great importance to the improvement of socio-cultural livelihoods. By 2010, 100% of households access public services, social policies and investment support. Fatal diseases are prevented and put under control. It is also targeted that over 95% of children at school age are enrolled at primary schools and 75% enrolled at secondary schools. In addition, over 80% of households use clean water; 80% of households have electricity; over 50% of households use hygienic latrines. This chapter uses the data from the BLS's household module to establish the initial performance indicators for household-level access to public services. It should be noted that this section is different from section 5. While the former focuses on the household-level access to public services, the latter placed attention on the communal access to infrastructures and services.

## 7.1 Household Access to Education

Chapter 5 provided a snapshot on access to education at the commune level in the P135-II communes, using the data from the BLS's commune surveys. This sub-section explores how the P135-II communes used these essential services.

Table 7.11 to 7.13 reports the enrollment rates in the P135-II communes. As primary education has recently become universal, it is expected that the primary school enrollment rates are high. Indeed, the gross enrollment rate was nearly

85% at the time of survey, while the net enrollment rate was around 78%. Notably, there were almost no differences when these rates are calculated for different sub-groups according to ethnicity, gender of household heads, language ability, or spatial dimension. These rates are however considerably lower that the national levels as revealed by the VHLSS 2006. Using this VHLSS 2006 survey, we calculated a net enrollment rate at primary schools of nearly 90% for the ethnic minority-headed households, while the corresponding figure for the Kinh and Hoa-headed counterparts was 98%. This difference is due to the fact that the P135-II communes are considered to be the poorest in the country, and thus educational attainment and coverage are less than the national average levels. In comparison to the P135-II's targeted level, a gap of ten percent in the gross enrollment rate at primary schools will need to be secured in the course of the next three years. This is clearly a challenging target.

As expected, moving up to higher educational levels, the enrollment rates are smaller than these found at primary schools. At the lower secondary level, the gross and net enrollment rates in the P135-II communes are respectively 63% and 56%. These rates found in the poorest communes are remarkably lower that these reported at the national level by the VHLSS 2006. Using this survey, the gross and net enrollment rate at the lower secondary schools are 96% and 79%, respectively. Moving from the lower secondary school to the upper secondary level, only 38% of the children at school ages enrolled in upper secondary schools, while the net enrollment rate fell down to 32%. Compared to the rates obtained from the VHLSS 2006 (i.e. the gross and net enrollment rates were 74% and 54%, respectively), these rates were also lower than the national average levels. Although substantial reductions in upper secondary education were observed compared to the enrollment levels to the primary education level or lower secondary level, it should be stressed that having 38% of children at school ages enrolled to upper secondary schools was quite impressive given only two percent of the P135-II communes were found to have upper secondary schools. In addition, as shown in Table 7.19, the average distance to the nearest upper secondary schools for the P135-II communes was 17 kilometers. The relatively high upper secondary enrollment could be partly explained by the system of semi-boarding or boarding schools for ethnic minorities that are common in all provinces. Unfortunately, we had no further information from the BLS to reaffirm this suggestive inference.

When being asked the reasons, among being over aged, don't like study, working, and other reasons, for not attending schools, the results given in Table 7.14 reveal some interesting issues. 'Over aged' was reported as the single most important obstacle of not attending school. On average, 38% of those who were not enrolled in any schools were due to being over aged. It is noted that the proportion of children who did not attend school because they were working was as high as 17%. The poor living standards lends an explanation to this 17% as these children are likely to be 'forced' to work as part of their households' coping strategy for insufficient income. Moreover, there was 14% of those who did not attend school reported 'other reasons'. As discussed earlier, it is unfortunately

that no further questions were asked in the BLS on these 'other reasons', but low awareness of the necessity of having education is likely to be an important reason.

Promoting educational enrollment in the poorest communes was one the target of the P135-I and it has also been on essential target of the P135-II. Therefore, it is expected that the proportions of pupils who are exempt from school fees and other types of contribution are high in the P135-II communes under the BLS. Table 7.15 shows that it is indeed the case. On average, 91% of primary school pupils were exempted from paying fees and contribution compared to the average of 75% calculated from the VHLSS 2006. For higher levels, the proportions of pupils that were exempted from lower and upper secondary schools were 81% and 69%, respectively, while the corresponding figures calculated from the VHLSS 2006 for these levels were 21% and 18%. These differences suggest the importance of the P135-II and other support initiative to promote educational attainment in the poorest communes. This also implies that continuing this support will be essential to achieve the target of promoting schooling in the P135-II communes.

## 7.2 Household Access to Healthcare Services

Table 7.2 to 7.10 report the access to healthcare services in the P135-II communes. It is first notable that 53% of the ill or injured individuals were treated at health centers of hamlets or communes they were living in. The average distance from the households to the health centers of 3.87 kilometers lends an explanation for this wide use of the hamlet-level or communal health centers. The data show that having medical treatment at hospitals accounted for 17% of the total cases of medical treatment during the course of 12 months in the P135-II communes. As discussed earlier, it is unfortunate that no questions on the conditions of healthcare facilities were asked but it is likely that hamlet-level or communal health centers are generally poorly equipped. These centers are therefore best used for normal diseases or for emergency treatment before transferring to hospitals at higher levels. In fact, the average distance to hospitals was found to be 39 kilometers, which would take at least three hours by public transport (where passenger transport services were available) or about one hour if motorbikes were used given the transportation conditions in these communes. In accordance to the figures on healthcare services obtained at the commune level as given in section 5, the usage of 'other' types of healthcare facilities was common for the P135-II households. Indeed, 30% of the ill or injured individuals were found to have medical treatment by other types of healthcare services. The BLS did not specify further questions on what could be the other types but some alternatives available in these poorest communes include self-treatment at home, having treatment by private medical practioners, and also using worship. It is unfortunate that we do not have further information to investigate how widely worship is used for medical treatment in the P135-II communes.
It is expected that given the poor living standards in the P135-II communes, the rate of exemption from medical treatment fees is high and it is indeed the case. Using the data from the BLS, we found that 55% of the individuals who received medical treatment over the course of 12 months before the time of interview were exempted from healthcare costs (Table 7.3). This rate of 55% is comparable to our calculation on the percentage of rural people being exempted from medical treatment fees using the VHLSS 2006 (the average rate was 57% for the country and 55% for rural areas). Notably, there was a big gap between the exemption rate between the ethnic minorities and the Kinh and Hoa: while 64% of the minorities were exempted from medical fees, only 37% of the Kinh and Hoa were exempted. The incidence of fee exemption was also higher in midland or mountainous communes compared to the coastal or delta P135-II communes. Having free healthcare certificates were reported to be the most popular reason for this exemption (i.e. 45% of the individuals who received medical treatment were exempted from healthcare fees had free healthcare certificates). These free healthcare certificates were granted for the poor household in a support for their access to healthcare services. Therefore, it is as expected that the incidence of having these free healthcare certificates was higher among ethnic minorities than that of the Kinh and Hoa (i.e. 52% and 31% for the minority and the Kinh and Hoa, respectively). Having health insurance cards was another reason for exemption of medical fees. The figures in Table 7.3 reveal that nearly eight percent of the individuals who received medical treatment were exempted from healthcare fees had health insurance cards.

#### 7.3 Household Access to Other Services

Household access to clean drinking water is given in Table 7.20 to 7.21. The findings reported in section 5 on communal access to drinking water are generally upheld at the household level. On average, 14% of the P135-II households used piped or filtered water for drinking, while more than 45% of them used drilled or soil wells for drinking and nearly 40% relied on natural sources such as river, lake, pond for drinking water. Access to clean drinking water varied substantially between the Kinh and Hoa and the minority. For the Kinh and Hoa-headed households, only 6% of them used water from river, lake, or pond for drinking while the corresponding figure of the ethnic minority-headed was nearly 57%. There are also marked differences between the P135-II communes in across the country and according to geographical characteristics. The incidence of having piped or filtered water was highest for the P135-II households in coastal or delta areas (i.e. 43% compared to only 7% in midland or mountainous areas). The P135-II households in the South were in better conditions in terms of access to clean drinking water than those in the Centre or the North. In an effort to shed lights on incidence of clean water, we adopted the commonly used definition of clean water applied in a number of poverty reports by WB and VASS (see footnote 13). The results show that 53% of P135-II households had clean drinking water. Given the current situation of using drinking water, there is a big challenge of achieving the target of 80% households having clean drinking water

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by 2010. Given the two-year period from now, fulfilling this shortage of clean drinking water in the P135-II is clearly challenging.

Compared to the current situation of household access to clean drinking water, access to electricity was in better conditions at the time of the BLS. Table 7.24 to 7.25 shows that nearly 75% of the P135-II households had electricity, and 72% of them reported that electricity was the major source of lighting. It is noted that the incidence of household using electricity is ten percentage point lower than that of communes having electricity (see Chapter 5). Although the BLS does not provide information on this difference, it might be due to either the cost of connecting electric wires from households to electric grid at communes or the cost of using electricity or both. In any cases, it implies that having electric grid to communes does not ensure that all households would have access to electricity. Additional costs must be taken into account in order to encourage the poorest to use electricity. In addition, as highlighted in section 5, the target of 80% communes having electricity by 2010 was already achieved at the time of the BLS. But there is still a gap of nearly five percent of households using electricity. However, this can be easily achieved during the three-year period from the time of the BLS to 2010.

Table 7.22 provides vital information on hygienic living conditions of the P135-II households by reporting the types of toilets used. Flush toilet, suilabh, and double vault compost latrine are considered hygienic types of toilets. On average, only 13% of the P135-II households had one of these three types of hygienic toilets, meanwhile 87% of the targeted households used 'other' types of toilets. The BLS does not provide information on these 'other' types. But it is most likely that 'others' in this context referred to simple and hence unhygienic types of toilets. Although the information on toilets used by households does not capture all aspects of hygienic living conditions of the P135-II households, it could be taken to suggest poor hygienic conditions in the P135-II communes. The data on how households discharge daily wastes also provides further evidence on hygienic conditions of life for the P135-II households. Table 7.25 shows that 74% of the P135-II households simply dumped household wastes to any land sites nearby or even directly to river/lakes (i.e. 71% dumped to land sites, 3% to river or lake) and none of these household wastes were collected. Given this, we are confident to conclude that the P135-II household lives in poor hygienic conditions. In this regard, the target of 50% households using hygienic latrines is clearly a very big challenge. Unless substantial efforts and investment quickly made, this important target will not be secured and this is a likely.

As part of the P135-II, agricultural extension services were provided for households to support agricultural production. Table 7.27 to 7.37 provide a description of some key services offered by this network, including training, face-to-face consultation on cultivation and other techniques, information provision. In terms of training, it

<sup>&</sup>lt;sup>15</sup> In this regard, agricultural extension services could be discussed in Section 5. However, as the focus on this section is to investigate household-level access to services, this discussion is structured here.

was unfortunate that no question on participation by individual households were asked. Instead, questions on training were asked for groups of households. Using this information, we found that only 23% of the P135-II households participated in groups of farmers/agricultural households or agricultural extension and training courses were delivered to 54% of these groups. With regard to consultation on cultivation and other techniques, 20% of the P135-II households had visited agricultural extension centres for consulting these techniques. Notably, staff of these agricultural extension centres were reported to be inactive as only five percent of the P135-II had received agricultural extension staff at home for providing support services. It could be taken to suggest low effectiveness of these centres. Unfortunately, we do not have sufficient information to investigate whether agricultural extension services were localized but our impression from the BLS household questionnaire was that the same set of services were offered every where without taking into account the above differences in land endowment, patterns of land uses.

The BLS also provides information on the use of legal services, which were defined as a wide range of legal (and administrative) services such as birth registration, marriage certificate, land use certificates, legal support in transaction of land uses and other resources... Table 7.23 reported that 24% of the P135-II communes had used legal services in the 12-month period prior to the interview. Although this incidence of using legal services was relatively low, almost all of the service users were satisfied with the services provided. However, the BLS does not allow us to measure the gap between the actual and target level. This is because the target was stated that 100% of households in need of legal services should receive legal assistance free of charge but those who were in needs of legal services were not identified in the BLS.

In summary, this chapter highlighted a gap of ten percent between the current enrollment rate at primary schools and the P135-II target. There was also a gap of 12 percentage point between the current enrollment rate at lower secondary schools and the target in 2010. What are more challenging for the P135-II are the targets of access to clean drinking water and using hygienic latrines. We found a 27% gap between the current incidence of household access to clean water and the targeted level. Most notably, there was a gap of nearly 40% between the current level of the P135-II households using hygienic latrines and the targeted level. Given there are three years and few months left before the end of 2010, these gaps are worrying. Unless substantial efforts and investment are made quickly, achieving these targets is an unlikely.

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# CONCLUSIONS AND SUGGESTIONS



"Beauty" - Photo: Binh Minh

## **CHAPTER 8 - CONCLUSIONS AND SUGGESTIONS**

This study investigated the P135-II BLS that mirrored the VHLSS with substantial modifications and used this dataset to inform the initial values on an extensive set of the performance indicators on the P135-II communes and households. As the quality of this BLS is crucial for our analysis and for further impact evaluation of the Program, we assessed the BLS before embarking on further analysis. The BLS appeared to be a sound survey that provides a rich source of information on the P135-II communes. For evaluation purposes, a control group of 134 communes was included in the sample. The underlying rationale is that as a follow-up survey was planned for 2010, measuring different in the set of performance indicators between the P135-II communes and these control communes will reveal impacts of the Program. In this regard, we found using both secondary data provided by CEMA and the BLS, that the treatment and control communes share the important relevant characteristics. This important finding was generally supported by statistical tests. However, some concerns were raised on differences between the P135-II communes and the control group in some aspects. Another caveat was due to the late beginning of the BLS (i.e. more than a year and a half since the Program started). But in overall the BLS provides a ground for sound impact evaluation. Given this evaluation, we informed the five main findings below (some policy implications are discussed in conjunction to these major findings).

First, using income data available from the BLS and the national income poverty line of VND 200,000/person/month, we found that 43% of the P135-II households was poor. A substantial gap between the Kinh-Hoa and nonKinh-Hoa was also detected. The poverty rate of the Kinh and Hoa households was 26% while the corresponding figure for ethnic minorities was 51%. In other non-income aspects of poverty, 46% of the P135-II communes revealed that they were lack of food over the past 12 months; 45% lack of clean water for cooking and drinking; 48% did not have enough medicines when they were ill or injured; and 33% found lack of cash to contribute to school fees. It was thus not surprising that more than a half of the P135-II households revealed their unhappiness with the current living standards. In all of these aspects, ethnic minorities were always found disadvantaged compared to the Kinh and Hoa households. Most importantly, we stressed that given this 'baseline' poverty, achieving the P135-II target of having no hunger-stricken households and a 30% poverty rate by 2010 is very challenging. Unless more resources are provided and effectiveness is enhanced (i.e. make current resources work harder), reducing poverty rate by 13 percentage points from now to 2010 appears to be unrealistic.

Second, in terms of labour allocation, most of individuals who were in working ages in the P135-II were engaged in some income-generating activities (the unemployment rate was exceptionally low at 0.6%). We however found that 58% of the working people in the P135-II were under-employed and 52% appeared to hold multiple jobs. This indicates that most of people found their main employment insufficient to support their families and/or themselves. Agriculture remained

the major source for 86% of total employment (including self employment) and supporting agriculture production was thus one of the four key components of the P135-II. At the time of survey, the P135-II households had on average 17,326m2 of agricultural land (40% for annual crops; another 40% for forestry; 10% for perennial crops; and 10% for the other types of land). Ethnic minority-headed households are better land endowed than Kinh and Hoa households and this is attributable to the dominant role of forestry land in total landholding of ethnic minorities.

The conventional wisdom that households in the poorest communes produce mainly noncash crops was challenged in this analysis as this appeared only in rice production. For other agricultural crops, proportions of crops traded varied from one quarter to a half of total output. Given these, agricultural income sources (crops, livestock, forestry, fisheries) accounted for about 60% of total household income, while other nonfarm income sources (wages, nonfarm enterprises) contributed to nearly 30% of total household incomes. In terms of policy implications, we suggested that provision of agriculture extension services should take into account differences in land endowment and crop patterns across different ethnic groups and regions. In addition, marketing services (such as market information, distribution) should be provided to make the poor less dependent on individual traders, which is likely to translate in lower prices compared to market prices.

Third, supporting infrastructure development was most costly activities under the P135-II. The focus was given to provide/improve access to roads, schools, healthcare stations, electricity, clean water, irrigation system. Within these facilities, we found that access to electricity and healthcare stations at commune level were more or less achieved before the onset of the Program. This raises a concern on the design of the BLS, particularly in setting priorities for the Program. Besides access to electricity and healthcare stations, achieving the targets on the other infrastructures is challenging as the gaps between the 'baseline' and the target are considerably high. 14 percentage point gap was reported for access to roads to villages; 20 percentage point gap for irrigation system; 22 percentage point gap in having schools. Poor water supply conditions also represent a challenge for infrastructure support as only less than five percent of the P135-II communes had access to piped and filtered water. It implies that restructuring the Program's budget is necessary. Given the two-year period from now, it seems that substantial investment and efforts are needed, especially to speed up the implementation process, to ensure that the P135-II would meet its target of infrastructure development. Otherwise, achieving the target set for infrastructure development will surely be unfeasible.

Fourth, the P135-II assumes the decentralization approach by promoting participation of communities and people to the implementation process. In practice, we found that participatory meetings were frequently applied to select projects, through some concerns were on the limited participation by the poor and attitude to put their voices across. But implementation of these projects

seemed to be quite problematic. Notably, only 10% projects organized public biddings; 53% informed financial information; 22% having a treasury account for transaction; 46% had Operation and Maintenance plan (O&M plan). Due to these problems, only 47% of the P135-II households benefited from the infrastructure development projects. In addition, giving communes 'ownership' in the P135-II infrastructure projects was a key result of the decentralization approach. But this objective was substantially ignored. It was targeted that 100% P135-II communes would be investment owners of infrastructure projects by 2010, but communes were the investment owners in only 27% of projects at the BLS time. For the projects that communes had the ownership, the impact of that ownership was not clear. We found that 67% of the commune-owned projects encountered no problems during the implementation process while the corresponding figure for the projects where the P135-II communes were not the 'owners' was just 55%. But the percentage of households who benefited from the investment projects owned by the commune was five percentage point lower than in the communes that did not own the projects. Our findings raise a concern on effectiveness of the decentralization approach applied for the P135-II. In our view, this could be attributed by insufficient management capacity at commune level. Potential benefits of decentralization are clear but conditional on availability of capacity to manage the implementation process of the P135-II projects.

Fifth, the P135-II attaches a great importance to the improvement of sociocultural livelihoods, which are achieved by improving access of poor households to education, healthcare, clean water, electricity and other services. In terms of access to education, we the enrolment rates of the P135-II communes appeared to be considerably lower than the average rates obtained from the VHLSS 2006. More importantly, achieving the Program's target is challenging as a ten percentage point shortfall was reported between the actual and targeted level at the primary level; 12 percentage point gap was found at the secondary level. It should be noted that these gaps existed in the presence of intensive support to the P135-II households in terms of school fee exemption.

Regarding healthcare, the use of hospital at district or higher level was not very popular given the average distance from the P135-II communes to these hospital was 39 kilometres. Therefore, the quality of healthcare provided at hamlets or communes, which accounted for 53% of total cases, is essential to the health conditions of the P135-II communes. In this regard, we suppose that improving medical facilities for these stations should be given priorities. We did not find difference between the rate of free medical treatment in the P135-II commune and the national average level. It implies that more households in these poorest communes should have been given free medical care. In addition, sanitation and hygienic conditions in the P135-II communes were worrying. It was reported that 53% of P135-II household had access to clean drinking water, suggesting a gap of 27% needed to be covered by 2010. In addition, 13% of the P135-II households had one of these three types of hygienic toilets; and 74% simply dumped household wastes to any land sites nearby or even directly to river/lakes. This could be taken to suggest that unless substantial efforts and investment

quickly made, important target of enhancing socio-cultural livelihoods for the P135-II households will not be secured and this is a likely.

Our overall impression from the findings in this study is that there have been a marked gap between the current 'baselines' outcomes/outputs and the targeted levels in 2010. This gap is especially pronounced in terms of providing access to most basic infrastructure facilities. Given the timeframe of the P135-II, implying a little more than three years left (since the time of the BLS), this gap represents important challenge for the P135-II. We suggest that unless efforts are made quickly and rightly, achieving the target is an unlikely. At this stage, we strongly recommend to speed up the progress of the P135-II projects, especially in terms of building roads, water supply, schools, and improving sanitation conditions for the P135-II communes. Restructuring the Program's budget to give less resource for the targets that were more or less achieved at the time of the survey to the targets that were still lagged behind is necessary. In addition, training activities should be capable enough to implement the participatory approach and manage the 'ownership' of the P135-II projects and this need to be done quickly.

For the evaluation of the P135-II, we recommend that the follow-up survey to be implemented as given the quality of the BLS, a good follow-up survey will provide a unique quasi-experimental setting for sound impact evaluation of the Program. In addition, it should be stressed that the BLS is probably the most comprehensive dataset we have ever had so far on ethnic minorities and on poorest communes of the country. Therefore, exploring this survey beyond the scope of this baseline study will potentially improve our current understanding of ethnic minorities in Vietnam. There has been a growing literature on widespread poverty and some other aspect of economic wellbeing amongst ethnic minorities but most of the current literature was based on the data available from the VLSSs or VHLSS. Unfortunately, these surveys were not designed to be representative for ethnic minorities and hence the results obtained from exploring these surveys should be thus taken with caution.

In this regard, the BLS provides potentially unique opportunities to make important (or even breakthrough) in our understanding of ethnic minorities in Vietnam. Among numerous possibilities, three key issues for P135-II can be pointed out. First, this report focuses on the basic ethnicity classification of Kinh and Hoa vs. minority. Nevertheless, the BLS provides the unique opportunity to disaggregate ethnic minorities into at least 10 different groups (see appendix 3). As the situation of specific ethnic minorities is potentially heterogeneous, considering just one aggregate can be misleading. Second, the report draws the broad picture of P135-II communes and households' living conditions. Some subject specific issues could be scrutinized with more attention. For instance, we could assess the ethnic income gap, trying to disentangle its components: factor endowment and returns to these factors. For this direction, the BLS provides us a unique property: different ethic groups living in poorest communes that are relatively homogenous. This property minimizes the effect of 'unobserved

factors' on the welfare gap between ethic groups as found in previous studies. Third, the BLS provides sufficient information to explore in details labour force participation of ethnic minorities and its impact on welfare. Currently, we are pretty in the darkness on the link between labour market participation of ethnic minority people and their poverty status.

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## **APPENDIX 1: SAMPLE WEIGHTS**

In order to obtain unbiased results, each household selected in the sample should be weighted by the inverse of its selection probability. Since the sample design is multi-staged and each stage is independent of each other, the (theoretical) selection probability is obtained by simply multiplying the selection probability at each stage. This probability can easily be estimated since the population size at each geographical level was known. The estimation of theoretical weights was done as follows:

According to Phung Duc Tung (2008), the probability of being selected in the sample of each household is defined by the following formula:

$$P_{t} = \frac{nP_{m}}{P} \frac{C_{mk}}{P_{m}^{*}} \frac{h_{mki}}{C_{mk}^{*}} \frac{r_{mkij}}{h_{mki}}$$

Where:

 $\boldsymbol{P}_{t}$  is the probability of selected household t  $% \boldsymbol{T}_{t}$  in the sample

n is number selected communes of treatment or control group.

P is total households of control or treatment group.

- $P_m$  is number of households in selected commune m (according to agriculture census).
- $P_m^*$  is the number of households in selected communes *m* of control or treatment group at the time of the survey.
- $C_{mk}$  is number of households in the selected villages k of treatment or control commune m (according to agriculture census).
- $C_{mk}^*$  is number of households in the selected villages *k* of treatment or control commune *m* at the time of survey.
- $h_{mki}$  is the number of households that are selected for both official households and reserve households in village k of commune *m*
- $\mathcal{F}_{mkij}$  is the number of households that are selected for official households for implementing the survey in village k of commune *m*

The weight for household t above is  $\frac{1}{P_t}$ 

The probability of selection and the weight have to be calculated separately for control and treatment household. The population of each selected villages, communes and total population of each control and treatment groups are taken from Agriculture Census (AC) to calculate weights. The individual's weight was computed by multiplying the household weight by the household size (total household member of the selected household).

## APPENDIX 2: CALCULATION OF HOUSEHOLD INCOME FROM THE BLS

The income module of the BLS strictly follows the style of the VHLSSs. The questionnaire is almost identical. Based on the questionnaire structure and on the commonly used way of dividing income sources in the existing studies, we divided income sources into eight categories: crop income, livestock income, fisheries income, forestry income, nonfarm enterprise income, wages, transfers, and other income.

#### **Crop income**

Crop income includes incomes from paddy, other food crops, industrial crops, fruit crops and crops' by products. Gross crop income is measured by the crop values that the household harvested over the last twelve months. Net income is then computed by subtracting the production cost from the gross income. The baseline questionnaire categorizes the cost of crop production into 19 groups, including seeds, saplings, chemical fertilizers, land rental and contracting, for instance. Costs refer to the total amount of money spent on those items for producing the values of crops harvested over the last 12 months.

#### Livestock income

Calculation of livestock income is fairly similar to that of crop income. Gross livestock income is computed by taking the value of the question asking "the total income from livestock breeding for the last 12 months" (Question 6b, Section 4b2.1). This question applies for a number of animals such as pig, cow, buffalo and chicken. Net livestock income is also computed by subtracting cost of livestock breeding from the gross income. Cost of livestock breeding is captured by Question 18, Section 4b2.2. This question combines eleven cost items (including livestock breeds; feed; medicine for cattle, poultry; energy and fuel; depreciation of fixed-assets; land rental and constructing; rental of assets; payments for hired labors; payments for loan interest for breeding; business taxes; and other expenses).

#### **Fisheries income**

Gross income from fisheries is taken from Question 6b, Section 4b5 which adds up three components of the values of fisheries, namely, values of fisheries sold, bartered, used for payments, used as gifts for the last 12 months; values of fisheries kept for household consumption and values used for other purposes for the last 12 months. Note that fishery activities consist of aquacultural raising, aquacultural catching and aquacultural services. Cost of fishery activities can be directly taken from the Question 19, Section 4b5. This question combines twelve components of the total cost of fisheries, including breeds; feeds; small, 10

non-durable tools; energy and fuel; small repair and maintenance; depreciation of fixed-assets; rent and bid for land use; rent of assets, machinery equipment and other means of production; payments for hired labours; payments of loan interest; business taxes and other expenses on fishery activities. Subtraction of the cost of fishery activities from its gross income generates the net fisheries income.

#### **Forestry income**

Forestry activities refer to planting/managing/protecting/maintaining forests, germinating forestry seedlings, collecting products from forests, harvesting forest trees (bamboos, wood, log,...including those from home garden); hunting, domesticating animals and forestry service activities. Gross forestry income is measured by the values of turnover and harvested output for the last 12 months and captured in Question 3, Section 4b4. Net income is also calculated by the similar way as in the three previous sources of household income. We deduct the cost of forestry activities which is taken from Question 14 in Section 4b4 from the gross income.

#### Nonfarm enterprise income

Incomes from nonfarm enterprise activities were computed from the information on household self-employed nonfarm activities, regardless of how these activities were organized. These can be taken in the form of household private enterprises or household small businesses, or household home-processed crops. Note that, in reality, nonfarm enterprise activities can be mixed across households. The revenues of output therefore should belong to all the households who own the mixed activities. Fortunately, the questionnaire already distinguishes the part of income that belongs to the household for us. Income allocated to the household is captured in Question 18A in Section 4c1. All expenses are then subtracted from total revenues generated by these activities to derive households' total net income from nonfarm businesses.

#### Wages

Wage incomes for wage employees reported in the surveys include salaries, and 'other payments', measured as bonuses, allowances, subsidies and any other types of payment. Salaries and other payments were both in cash and in kind. Experiences from V(H)LSS data show that, on average, 'other payments' constitute an average share of nine percent in the total wage in the 1993-2002 period. As the share of the 'other payments' are relatively high, excluding these payments is likely to yield misleading figures in computing wages. It is important to note that wage data were available for wage earners only. For those who were self-employed in their own household business, individual wage data were not reported in the surveys, except the average earning levels for every one in their self-employed businesses. Wages were reported as salaries and other payments over the past 12 months. Concretely, in the baseline, income from

wages is calculated by the summation of questions 13, 14, 25, 26, 29 and 33 in Section 4a. For wage income, gross and net incomes are identical as the survey assumes that the activities were not incurred any cost.

#### **Transfers**

Income from transfers includes remittance and value of in-kind presents from people overseas who are not household members; domestic remittance and value of in-kind presents from people who are not household members; pension, one-time sickness and job loss allowance; social welfare allowance; and income and support from charity organizations, associations, or firms. Gross and net incomes from transfers are identical as no cost was incurred. The income is the values received over last twelve months from the above sources.

#### **Other income**

The remaining sources of household income were put into one category, so called, other income. The sources include income from education (in the forms of scholarship and educational assistance); income from doing agricultural services; income from renting houses and land; income from renting out agricultural land; and various types of other income which was gathered in a separated section in the questionnaire (Section 4D1, not counting transfer items).

## APPENDIX 3: CLASSIFICATION OF ETHNICITY FOR FUTURE STUDIES USING THE BLS

Most of previous quantitative works on ethnic issues in Vietnam have focused on the major divide between Kinh and others ethnic minorities (see Baulch et al., 2008b for a review). More recent papers went further in considering 7 ethnic groups: Kinh, Hoa, Khmer & Chăm, Thái, Tày, Mường & Nùng, Other Northern minorities, Central Highland minorities, Others (Baulch et al. 200ba). Nevertheless, Baulch et al. is based on the VHLSSs, which sample, although larger (9,000 households in 2004 vs. 6,000 for the BLS), does not over represents ethnic minorities as the BLS does. Therefore, the BLS gives ground for further disaggregation. Furthermore, the BLS allows identifying ethnic identification at the individual level while the VHLSS only collect the information for the household's head.

Table A3.1 presents the BLS sample (both households and individuals) along the 53 official ethnic groups recognized in Vietnam. With 1,241 households, the Kinhs account only for 21% of the sample (and 17% of the individuals, revealing a smaller household's size). Such a share is more or less the inverse of the national ethnic composition. At the household level, 39 out the 53 ethnic groups are represented in the sample (and 44/53 at the individual level due to exogamic households). The 14 non-represented ethnic groups (Gia-rai, Xtiêng, Chu ru, Ma, Lô Lô, La Hủ, Chơ-ro, La Chí, Pu Péo, La Ha, Chứt, Si La, Cơ Lao, Brâu, Kháng, *O*'-đu) are the less populous (in some case a few tens of people in the whole country), accounting all together for a very small share of share of Vietnamese population.

	Households	Individuals		Households	Individuals
Kinh (Việt)	1,241	5,051	Xinh-mun	63	343
Thái	584	3,061	Gié Triêng	83	423
Tày	753	3,422	Bru-Vân Kiều	70	376
Mường	498	2,214	Ta-ôi	31	164
Khơ-me	133	566	Mạ	-	1
Nùng	292	1,384	Lô Lô	-	-
Hoa (Hán)	41	216	Hà Nhì	18	86
Hmông (Mèo)	808	4,884	La Hủ	-	3
Dao	578	3,149	Cống	15	67
Ê Đê	30	178	Chơ-ro	-	-
Gia-rai	-	1	La Chí	-	-
Ba na	90	514	Lào	1	1
Xơ-đăng	60	326	Pu Péo	-	-
Ra-glai	58	284	Phù Lá	7	41
Cơ-ho	51	320	La Ha	-	-

#### Table A3.1 Distribution of ethnic groups in the BLS

Chăm (Chàm)	15	77	Ngái	50	251
Giáy	8	46	Chứt	-	-
Sán Chay	41	217	Si La	-	-
Hrê	120	512	Cơ Lao	-	-
Thổ	1	4	Pà Thẻn	2	9
Sán Dìu	2	13	Brâu	-	-
Khơ-mú	18	109	Bố Y	1	4
Mnông	27	162	Mảng	35	213
Cơ Tu	90	492	Kháng	-	-
Xtiêng	-	-	O'-đu	-	1
Chu ru	-	36	Unspecified	5	-
Со	45	181	Total	5,965	29,366

#### Source: authors' calculation from the BLS

Nevertheless, given the too small number of households for some ethnic groups to get statistical relevance and the objective of comparing treatment and control groups, we proceed in aggregating the BLS households in 11 ethnic groups, as show in Table A3.2 below. Although this disaggregation was not taken in this report, further research using the BLS should adopt this to provide insights across different ethnic groups.

Households	Treatment	Control	Total	Tổng
1- Kinh / Hoa		524	758	1,282
2- Thái		209	375	584
3- Tày		263	490	753
4- Mường		262	236	498
5- Khơ-me / Chăm		54	94	148
6- Nùng		96	196	292
7- Hmông		205	603	808
8- Dao		147	431	578
9- Other Northern	Xinh-mun, Sán Chay, Mảng, Khơ-mú, Hà Nhì, Cống, Giáy, Phù Lá, Sán Dìu, Pà Thẻn, Lào, Bô Y	57	154	211
minorities:	Xinh-mun, Sán Chay, Mảng, Khơ-mú, Hà Nhì, Cống, Giáy, Phù Lá, Sán Dìu, Pà Thẻn, Lào, Bô Y	57	154	211
10- Other Central	Bru-Vân Kiều, Ngái, Ta-ôi, Thổ, không xác định	44	113	152
Highland:	Ba na, Cơ Tu, Gié Triêng, Gié Triêng, Xơ- đăng, Ra-glai, Cơ-ho, Co, Ê Đê, Mnông	141	528	669
11- Other:	Bru-Vân Kiều, Ngái, Ta-ôi, Thổ, Unspecified	44	113	152
Total		2,002	3,963	5,965

#### Table A3.2 Aggregation of Ethnicity into 12 Ethnic Groups using the BLS

Source: authors' calculation from the BLS Given this classification, the poverty profile is reported in table A3.3 and A3.4 below.

Ethnicity	P135-II com	munes		non-P135-II	communes	
	Headcount rate	Poverty	Khoảng cách nghèo điều chỉnh	Thu nhập đầu người	Khoảng cách nghèo	Khoảng cách nghèo điều chỉnh
Kinh and Hoa	gap	Squared poverty gap	Headcount rate	Poverty	0,31	12,27
	gap	Squared poverty gap	[0,84]	[0,03]	[0,15]	[11,66]
Thai	0,51*	0,20**	0,11**	0,34*	0,11**	0,05**
	[0,06]	[0,04]	[0,03]	[0,07]	[0,02]	[0,01]
Тау	0,46	0,17	0,09	0,43	0,14	0,06
	[0,04]	[0,02]	[0,02]	[0,08]	[0,04]	[0,02]
Muong	0,45	0,13	0,05	0,38	0,13	0,06
	[0,06]	[0,02]	[0,01]	[0,05]	[0,02]	[0,01]
Khmer and	0,29	0,12	0,06	0,25	0,23	0,88
Cham	[0,04]	[0,03]	[0,02]	[0,14]	[0,16]	[0,77]
Nung	0,52	0,15	0,06	0,4	0,15	0,07
	[0,06]	[0,03]	[0,01]	[0,10]	[0,05]	[0,03]
H'Mong	0,74	0,29*	0,15*	0,65	0,22*	0,10*
	[0,04]	[0,02]	[0,01]	[0,05]	[0,03]	[0,02]
Dao	0,47	0,16	0,08	0,57	0,23	0,12
	[0,04]	[0,02]	[0,01]	[0,08]	[0,05]	[0,03]
Other Northern	0,5	0,21	0,11	0,51	0,25	0,18
Uplands	[0,10]	[0,07]	[0,05]	[0,17]	[0,13]	[0,12]
Central Highlands	0,61**	0,26**	0,15**	0,42**	0,11**	0,05**
	[0,05]	[0,04]	[0,03]	[0,05]	[0,04]	[0,03]
All others	0,61	0,23	0,12	0,53	0,23	0,13
	[0,04]	[0,02]	[0,01]	[0,07]	[0,05]	[0,04]
Total	0,43	0,19	0,46	0,37	0,21	3,71
		[0,02]	[0,28]	[0,03]	[0,05]	[3,38]

#### Table A3.3: Income-based poverty measures

Mean corrected by sampling weights; Standard errors of mean in brackets; \*\*\* difference in mean between two groups is significant at 1%, \*\* difference in mean between two groups is significant at 5%, \* difference in mean between two groups is significant at 10%.

Ethnicity	P135-II o	commune	S		non-P13	5-II comn	nunes		Dis-
	Self-rep poverty	orted	Income- poverty	based	Self-rep poverty	orted	Income- poverty	based	tribu- tion of
	Head- count rate	Distri- bution of the poor	<sup>-</sup> popula- tion						
Kinh and Hoa	0,51***	0,2	0,51**	0,22	0,37***	0,2	0,41**	0,22	0,33
	[0,02]	[0,03]	[0,02]	[0,04]	[0,03]	[0,03]	[0,03]	[0,04]	[0,03]
Thai	0,26	0,12	0,26	0,11	0,23	0,12	0,28	0,11	0,11
	[0,02]	[0,03]	[0,03]	[0,04]	[0,04]	[0,03]	[0,03]	[0,04]	[0,02]
Тау	0,53***	0,1	0,54**	0,15	0,39***	0,1	0,45**	0,15	0,11
	[0,02]	[0,02]	[0,03]	[0,05]	[0,03]	[0,02]	[0,04]	[0,05]	[0,02]
Muong	0,47	0,07	0,44	0,14	0,39	0,07	0,39	0,14	0,07
	[0,03]	[0,02]	[0,03]	[0,04]	[0,05]	[0,02]	[0,06]	[0,04]	[0,01]
Khmer and	0,47***	0,09	0,45	0,06	0,25***	0,09	0,33	0,06	0,09
Cham	[0,05]	[0,03]	[0,06]	[0,04]	[0,03]	[0,03]	[0,05]	[0,04]	[0,03]
Nung	0,42***	0,04	0,44	0,05	0,33***	0,04	0,39	0,05	0,03
	[0,02]	[0,01]	[0,02]	[0,02]	[0,02]	[0,01]	[0,03]	[0,02]	[0,01]
H'Mong	0,49***	0,13	0,34	0,1	0,33***	0,13	0,28	0,1	0,09
	[0,03]	[0,02]	[0,04]	[0,03]	[0,03]	[0,02]	[0,04]	[0,03]	[0,02]
Dao	0,3	0,06	0,26	0,07	0,26	0,06	0,24	0,07	0,06
	[0,03]	[0,01]	[0,03]	[0,03]	[0,04]	[0,01]	[0,09]	[0,03]	[0,01]
Other Northern	0,46***	0,04	0,47**	0,03	0,35***	0,04	0,39**	0,03	0,03
Uplands	[0,02]	[0,01]	[0,02]	[0,02]	[0,03]	[0,01]	[0,03]	[0,02]	[0,01]
Central	0,45***	0,09	0,51***	0,03	0,31***	0,09	0,40***	0,03	0,05
Highlands	[0,02]	[0,02]	[0,03]	[0,02]	[0,03]	[0,02]	[0,03]	[0,02]	[0,01]
All others	0,55	0,07	0,47*	0,04	0,47	0,07	0,36*	0,04	0,04
	[0,04]	[0,02]	[0,03]	[0,02]	[0,09]	[0,02]	[0,05]	[0,02]	[0,01]
Total	0,43***		0,43		0,33***		0,37		
			[0,02]		[0,02]		[0,03]		

#### Table A3.4: Income-based and self-reported poverty

Mean corrected by sampling weights; Standard errors of mean in brackets; \*\*\* difference in mean between two groups is significant at 1%, \*\* difference in mean between two groups is significant at 5%, \* difference in mean between two groups is significant at 10%.

Note that we did not do the mean test the distribution indicators.

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## TABLES AND FIGURES



"Selling Cloths" - Photo: Kieu Var

	P135-II	communes	NonP <sup>-</sup> n	135-II com- nunes	Тє	est result	S
	size	Mean	size	mean	Differ- ence	T-Test	Ha: diff != 0
Population size	1,632	3,598***	724	4910.7	-1312.8	9.1	0.00%
Poverty incidence	1,512	66.2%***	691	42.70%	23.5	-22.3	0.00%
School	1,632	39.7%***	727	57.20%	-17.5	8	0.00%
Committee house	1,632	56.1%***	727	68.50%	-12.4	5.7	0.00%
Car road	1,632	93.8%**	727	96.60%	-2.7	2.7	0.60%
Electricity	1,632	85.2%***	727	95.30%	-10.2	7.2	0.00%
Health center	1,632	60.8%***	727	75.50%	-14.7	7	0.00%
Irrigation	1,632	63.10%	727	63.50%	-0.4	0.2	83.90%
Market	1,632	22.8%***	727	42.10%	-19.3	9.7	0.00%
Cultural house	1,632	20.2%***	727	27.50%	-7.3	3.9	0.00%
Media station	1,632	39.3%***	727	48.60%	-9.2	4.2	0.00%
Total infrastructure	1,632	4.8***	727	5.7	-93.8	12.2	0.00%

#### Table 2.1: Testing differences in P135-II and P135-1 commune's characteristics





Source: CEMA database for sampling design, 2007; authors' calculation.

	P135-II	communes	NonP1 m	35-II com- iunes		Test resul	ts
	size	mean	size	mean	Differ- ence	T-Test	Ha: diff != 0
Population size	266	3,454	134	3,676	222	0.9	39.40%
Poverty incidence	266	61.00%	134	59.90%	-1.1	-0.6	57.60%
School	266	39.80%	134	46.30%	6.5	1.2	22.10%
Committee house	266	52.60%	134	56.70%	4.1	0.8	44.00%
Car road	266	93.20%	134	92.50%	-0.7	-0.3	79.80%
Electricity	266	85.3%***	134	95.50%	10.2	3.1	0.10%
Health center	266	55.60%	134	58.20%	2.6	0.5	62.60%
Irrigation	266	61.30%	134	59.00%	-2.3	-0.4	65.50%
Market	266	24.00%	134	20.90%	-3.1	-0.7	47.90%
Cultural house	266	23.30%	134	23.90%	0.6	0.1	89.90%
Media station	266	38.70%	134	37.30%	-1.4	-0.3	78.50%
Total infrastructure	266	4.7	134	4.9	0.2	0.9	38.20%
Participation function1	250	44.20%	113	41.50%	-2.7	-1.4	16.20%
Participation function2	250	46.4%*	113	41.50%	-4.9	-2	5.10%

#### Table 2.2 Testing differences in treatment and control group communes

Source: CEMA database for sampling design, 2007; authors' calculation.

#### Table 2.3: Testing differences in treatment and control groups in the BLS

	P135-II	communes	NonP1 m	35-II com- iunes		Test resul	ts
	size	mean	size	mean	Differ- ence	T-Test	Ha: diff != 0
		Cor	nmunes				
Population size	266	3,770	134	3,989	219	0.7	48.60%
Poverty incidence	266	52.9%***	134	44.30%	-8.6	-4.3	0.00%
School	266	78.20%	133	84.20%	6	1.4	15.60%
Committee house	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Car road	266	66.2%***	134	80.60%	14.4	3	0.10%
Electricity	266	84.6%**	134	91.80%	7.2	2	4.30%
Health center	266	97.00%	134	96.30%	-0.7	-0.4	70.10%
Irrigation	263	62.00%	133	66.20%	4.2	0.8	41.50%
Market	264	29.90%	132	37.10%	7.2	1.4	15.00%
Cultural house	263	21.3%*	133	30.10%	8.8	1.9	5.40%
Media station	265	38.50%	133	46.60%	8.1	1.5	12.10%
Total infrastructure	260	3.8***	131	4.4	0.6	3.8	0.00%
		Househo	lds/Indiv	idual			
Poverty Incidence	3,963	42.70%	2,002	37.30%	-5.4	-2.5	11.30%
Ethnic minority share	24,003	70.30%	5,393	74.00%	3.7	0.4	50.60%

#### Figure 3.1 Income cumulative density functions for treated and control households



Hình 3.1 Hàm phân phối mật độ thu nhập giữa nhóm đối chứng và nhóm thụ hưởng

	P1:	35-II commu	nes	non-	P135-II co	mmunes
	"Head- count rate (%)"	"Poverty gap"	Squared poverty gap	"Head- count rate (%)"	"Pov- erty gap"	Squared poverty gap
		Ethnici	ty	•	•	•
	51.15**	0.19	0.1	41.14**	0.16	0.18
non-Kinn and nonHoa	[2.17]	[0.01]	[0.01]	[3.32]	[0.02]	[0.11]
Kinh and Llag	25.87	0.19	1.19	27.88	0.31	12.27
Kinn and Hoa	[2.64]	[0.07]	[0.84]	[3.03]	[0.15]	[11.66]
		Daily langu	lages			•
Absolutely no or little Viet-	54.45**	0.21	0.11	44.69**	0.19	0.25
namese	[2.69]	[0.01]	[0.01]	[4.03]	[0.03]	[0.17]
Mixed between Vietnamese	44.21	0.15	0.08	38.97	0.14	0.07
and ethnic languages	[3.00]	[0.02]	[0.01]	[6.39]	[0.02]	[0.01]
Absolutely no or little ethnic	44.56	0.19	0.1	33.03	0.12	0.07
languages	[6.43]	[0.04]	[0.03]	[5.18]	[0.03]	[0.02]
	Gen	der of hous	ehold head			
Mala	44.2	0.2	0.52	38.86	0.22	4.29
Iviale	[2.09]	[0.03]	[0.33]	[2.80]	[0.05]	[3.95]
Fomalo	33.61	0.14	0.11	28.04	0.15	0.33
remale	[4.38]	[0.02]	[0.04]	[3.95]	[0.05]	[0.27]
	Geo	ography of c	ommunes			
Coostal or dalta	25.72	0.18	1.3	24.15	0.19	0.61
	[3.33]	[0.10]	[1.30]	[8.90]	[0.11]	[0.53]
Othors	47.47**	0.19	0.24	39.02**	0.21	4.32
Others	[2.19]	[0.01]	[0.13]	[2.69]	[0.05]	[4.02]
		Regior	IS			
North	51.22***	0.19	0.11	39.86***	0.23	5.5
NOTUT	[2.54]	[0.01]	[0.02]	[3.13]	[0.07]	[5.15]
Contro	46.61*	0.18	0.09	36.13*	0.13	0.06
Centre	[3.19]	[0.02]	[0.01]	[5.11]	[0.02]	[0.02]
South	25.52	0.2	1.38	24.87	0.19	0.57
	[3.11]	[0.08]	[1.02]	[8.13]	[0.10]	[0.49]
Total	42.72	0.19	0.46	37.27	0.21	3.71
IOLAI	[2.12]	[0.02]	[0.28]	[2.66]	[0.05]	[3.38]

#### Table 3.1: Income-based poverty measures

Mean corrected by sampling weights; Standard errors of mean in brackets; \*\*\* difference in mean between two groups is significant at 1%, \*\* difference in mean between two groups is significant at 5%, \* difference in mean between two groups is significant at 10%.

#### Table 3.2: Income-based and self-reported poverty

		P135-II co	ommunes		no	on-P135-II	commune	s	
	Self-rej pove	ported erty	Income pove	-based erty	Self-re pove	ported erty	Income pove	-based erty	"Dis- tribu-
	"Head- count rate (%)"	"Distri- bution of the poor (%)"	tion of popu- lation (%)"						
		-	E	thnicity	<u> </u>				
non-Kinh and	51.23***	79.68	51.15**	78.18	37.36***	79.68	41.14**	78.18	67.2
nonHoa	[2.13]	[0.03]	[2.17]	[0.04]	[2.54]	[0.03]	[3.32]	[0.04]	[0.03]
Kinh and Haa	26.08	20.32	25.87	21.82	23.49	20.32	27.88	21.82	32.8
		[0.03]	[2.64]	[0.04]	[3.79]	[0.03]	[3.03]	[0.04]	[0.03]
			Daily	/ languag	es				
Absolutely no or	53.01***	72.3	54.45**	65.48	39.31***	72.3	44.69**	65.48	68.46
little Vietnamese	[2.50]	[0.03]	[2.69]	[0.05]	[2.70]	[0.03]	[4.03]	[0.05]	[0.02]
Mixed between Viet-	46.85	21.35	44.21	23.04	39.07	21.35	38.97	23.04	23.49
namese and ethnic languages	[3.26]	[0.03]	[3.00]	[0.05]	[5.46]	[0.03]	[6.39]	[0.05]	[0.02]
Absolutely no or	46.58***	6.35	44.56	11.48	25.04***	6.35	33.03	11.48	8.05
little ethnic lan- guages		[0.03]	[6.43]	[0.05]	[3.45]	[0.03]	[5.18]	[0.05]	[0.02]
			Gender of	househo	ld head				
Mala	41.87***	84.05	44.2	88.96	33.29***	84.05	38.86	88.96	85.91
IVIAIE	[1.87]	[0.01]	[2.09]	[0.02]	[2.43]	[0.01]	[2.80]	[0.02]	[0.01]
Famala	48.82***	15.95	33.61	11.04	33.43***	15.95	28.04	11.04	14.09
remaie		[0.01]	[4.38]	[0.02]	[3.47]	[0.01]	[3.95]	[0.02]	[0.01]
	-		Geograph	ny of com	munes				
Coostal or dalta	29.69	15.03	25.72	9.42	26.3	15.03	24.15	9.42	20.67
Coastal of delta	[3.47]	[0.05]	[3.33]	[0.05]	[4.39]	[0.05]	[8.90]	[0.05]	[0.04]
Othere	46.39***	84.97	47.47**	90.58	34.76***	84.97	39.02**	90.58	79.33
Others		[0.05]	[2.19]	[0.05]	[2.63]	[0.05]	[2.69]	[0.05]	[0.04]
			F	Regions					
North	44.51***	49.36	51.22***	72.34	31.47***	49.36	39.86***	72.34	50.09
NORT	[2.40]	[0.04]	[2.54]	[0.05]	[2.58]	[0.04]	[3.13]	[0.05]	[0.04]
Contro	54.9	30.71	46.61*	17.26	46.64	30.71	36.13*	17.26	23.07
Centre	[3.70]	[0.04]	[3.19]	[0.05]	[8.73]	[0.04]	[5.11]	[0.05]	[0.04]
South	29.78	19.93	25.52	10.4	27.62	19.93	24.87	10.4	26.84
South		[0.04]	[3.11]	[0.05]	[4.17]	[0.04]	[8.13]	[0.05]	[0.04]
Total	42.84***		42.72		33.31***		37.27		
TOLAI	[1.80]		[2.12]		[2.30]		[2.66]		

"Mean corrected by sampling weights; Standard errors of mean in brackets; \*\*\* difference in mean between two groups is significant at 1%, \*\* difference in mean between two groups is significant at 5%, \* difference in mean between two groups is significant at 10%.

		P1	35-Il commun	es			-uou	P135-II comm	unes	
	Mean	S.E	Median	Min	Мах	Mean	S.E	Median	Min	Мах
				Ethnic	ity					
non-Kinh and non-Hoa	3019.22	112.56	2169.38	-5207.00	13956.67	3648.60	231.46	2619.13	-1321.20	14451.67
Kinh and Hoa	4505.50	223.87	3325.00	-5272.00	14347.80	4774.28	197.99	3408.75	-1027.75	14550.00
				Daily lang	uages					
Absolutely no or little Vietnam- ese	2852.07	130.32	2037.75	249.17	13875.33	3459.62	301.27	2346.00	-1321.20	14355.75
Mixed between Vietnamese and ethnic languages	3430.53	177.67	2597.25	-5207.00	13956.67	3680.79	308.61	3162.50	274.00	14451.67
Absolutely no or little ethnic languages	3216.52	324.06	2488.25	62.00	13638.50	4247.99	428.06	3024.40	-1027.75	13525.00
			Ge	nder of hous	ehold head					
Male	3407.67	117.72	2286.70	-5272.00	14347.80	3805.39	188.24	2674.38	-1321.20	14550.00
Famale	4003.84	272.24	2641.67	-4441.67	13956.67	4888.58	285.50	3462.25	-52.75	14399.00
			Ū	eography of c	sommunes					
Coastal or delta	4397.20	292.74	3676.22	-4441.67	13962.50	5129.49	772.44	4260.25	20.00	14355.75
Others	3241.61	117.50	2264.63	-5272.00	14347.80	3809.93	166.14	2726.67	-1321.20	14550.00
				Regior	IS					
North	3035.46	111.10	2206.71	-5272.00	13927.71	3827.07	192.80	2747.11	-1321.20	14550.00
Centre	3352.88	199.13	2314.07	-4832.50	14104.75	3737.83	351.99	2675.50	25.00	13185.00
South	4386.54	271.92	3368.00	-4441.67	14347.80	5043.36	705.76	3859.07	-52.75	14355.75
Total	3487.12	117.67	2332.67	-5272.00	14347.80	3962.19	186.40	2743.29	-1321.20	14550.00

Table 3.3: Statistical moments based on per capita income ('000 VND)

Mean corrected by sampling weights; Standard errors of mean in brackets;

	P13	5-II commu	nes	non-P	135-II com	nunes
		Of whi	ch (%)		Of wh	ich (%)
	food	Not often	Very often	food	Not often	Very often
		Ethnicity				
non Kinh and nonHoa	52.92***	67.98*	32.02*	44.23***	75.10*	24.90*
	[2.01]	[1.86]	[1.86]	[2.63]	[3.25]	[3.25]
Kinh and Hoa	33.24	66.45**	33.55**	29.23	78.10**	21.90**
		[4.15]	[4.15]	[3.06]	[3.75]	[3.75]
	D	aily languag	jes			
Absolutely no or little Vietnam-	55.64*	66.98	33.02	47.98*	71.13	28.87
ese	[2.43]	[2.20]	[2.20]	[3.65]	[3.90]	[3.90]
Mixed between Vietnamese	49.2	70.20**	29.80**	41.61	81.82**	18.18**
and ethnic languages	[3.15]	[4.12]	[4.12]	[3.96]	[4.02]	[4.02]
Absolutely no or little ethnic	43.39	69.99	30.01	34.86	85.46	14.54
languages		[9.07]	[9.07]	[3.89]	[4.91]	[4.91]
	Gende	r of househo	old head			
Male	46.10*	69.66**	30.34**	40.41*	76.06**	23.94**
	[2.02]	[1.72]	[1.72]	[2.38]	[2.75]	[2.75]
Fomalo	47.49*	55.48**	44.52**	36.55*	73.72**	26.28**
Tennale		[4.03]	[4.03]	[3.70]	[5.84]	[5.84]
	Geogr	aphy of con	nmunes			
Coastal or dolta	24.58	67.32	32.68	31.08	81.66	18.34
	[3.95]	[5.86]	[5.86]	[4.98]	[6.87]	[6.87]
Others	52.18***	67.48**	32.52**	40.94***	74.57**	25.43**
		[1.85]	[1.85]	[2.40]	[2.97]	[2.97]
		Regions				
North	48.91***	72.28	27.72	38.03***	76.15	23.85
	[2.14]	[2.18]	[2.18]	[2.41]	[3.83]	[3.83]
Centre	56.21	64.13	35.87	50.29	70.25	29.75
Centre	[4.31]	[2.97]	[2.97]	[7.47]	[4.13]	[4.13]
South	33.33	60.51***	39.49***	34.03	79.99***	20.01***
5000		[4.07]	[4.07]	[5.33]	[5.71]	[5.71]
Tetal	46.30**	67.61**	32.39**	39.85**	75.75**	24.25**
IOLAI	[2.07]	[1.73]	[1.73]	[2.19]	[2.69]	[2.69]

#### Table 3.4: Self-assessment: Lack of food over last 12 months

"Mean corrected by sampling weights; Standard errors of mean in brackets; \*\*\* difference in mean between two groups is significant at 1%, \*\* difference in mean between two groups is significant at 5%, \* difference in mean between two groups is significant at 10%.

	P135-II communes			non-P135-II communes					
	% lack Of which (%)		ich (%)	% lack	Of which (%)				
	of clean	Not	Very	of clean	Not	Very			
	water	often	often	water	often	often			
Ethnicity									
non Kinh and non-Hoa	55.63**	37.72	62.28	45.59**	31.31	68.69			
	[2.63]	[2.57]	[2.57]	[4.06]	[3.98]	[3.98]			
Kinh and Haa	23.69	38.31	61.69	29.83	39.99	60.01			
		[5.77]	[5.77]	[4.64]	[6.27]	[6.27]			
	Dail	y languag	es						
Absolutoly no or little Vietnemese	60.38	35.05	64.95	50.42	26.71	73.29			
Absolutely no or little vietnamese	[2.87]	[2.66]	[2.66]	[5.31]	[4.41]	[4.41]			
Mixed between Vietnamese and	46.5	42.75	57.25	45.08	36.92	63.08			
ethnic languages	[4.00]	[5.18]	[5.18]	[5.33]	[6.23]	[6.23]			
Absolutely no or little ethnic lan-	43.69	56.12	43.88	27.88	51.01	48.99			
guages		[8.30]	[8.30]	[5.42]	[9.98]	[9.98]			
	Gender o	f househo	ld head						
Mala	46.3	38.34	61.66	42.45	32.58	67.42			
	[2.73]	[2.53]	[2.53]	[3.47]	[3.66]	[3.66]			
Fomalo	36.01	33.8	66.2	32.52	37.52	62.48			
remaie		[4.64]	[4.64]	[4.19]	[6.51]	[6.51]			
	Geograp	hy of com	munes						
Coastal or dolta	21.18	23.18	76.82	19.98	7.49	92.51			
	[3.91]	[9.67]	[9.67]	[7.52]	[8.03]	[8.03]			
Othors	51.74	39.43	60.57	44.95	35.17	64.83			
Others		[2.48]	[2.48]	[3.59]	[3.76]	[3.76]			
		Regions							
North	53.75**	38.01	61.99	41.30**	31.88	68.12			
Norui	[3.44]	[3.36]	[3.36]	[4.16]	[4.70]	[4.70]			
Centre	52.39	40.28	59.72	57.32	42.48	57.52			
Centre	[4.50]	[3.64]	[3.64]	[6.14]	[4.43]	[4.43]			
South	24.76	32.59	67.41	23.61	18.3	81.7			
30001		[7.38]	[7.38]	[7.58]	[11.38]	[11.38]			
Total	44.85	37.83	62.17	40.99	33.16	66.84			
IUIAI	[2.64]	[2.42]	[2.42]	[3.40]	[3.58]	[3.58]			

#### Table 3.5: Self-assessment: Lack of clean water over last 12 months

"Mean corrected by sampling weights; Standard errors of mean in brackets; \*\*\* difference in mean between two groups is significant at 1%, \*\* difference in mean between two groups is significant at 5%, \* difference in mean between two groups is significant at 10%.

	P135-II communes		non-P135-II communes						
	% look of	Of wh	ich (%)	% look of	Of which (%)				
	medicine	Not often	Very often	medicine	Not often	Very often			
Ethnicity									
non Kinh and popUco	52.75	81.38	18.62	48.34	77.81	22.19			
	[2.32]	[1.61]	[1.61]	[3.72]	[3.48]	[3.48]			
Kinh and Hoa	28.84*	81.68	18.32	36.90*	78.68	21.32			
		[3.28]	[3.28]	[2.90]	[4.12]	[4.12]			
	Da	ily langua	ges						
Absolutely no or little Vietnam-	53.36	82.53**	17.47**	48.16	72.22**	27.78**			
ese	[2.69]	[1.62]	[1.62]	[4.74]	[4.86]	[4.86]			
Mixed between Vietnamese and	54.72	78.94	21.06	58.96	85.8	14.2			
ethnic languages	[3.48]	[3.73]	[3.73]	[5.27]	[3.77]	[3.77]			
Absolutely no or little ethnic	42.31	77.95	22.05	31.36	90.99	9.01			
languages		[9.67]	[9.67]	[4.43]	[4.23]	[4.23]			
	Gender	of househ	old head						
Mala	45.51	82.3	17.7	45.73	78.43	21.57			
Indie	[2.49]	[1.52]	[1.52]	[3.01]	[2.83]	[2.83]			
Female	39.57	75.46	24.54	40.73	75.37	24.63			
remale		[4.28]	[4.28]	[3.54]	[5.45]	[5.45]			
	Geogra	phy of cor	nmunes		_				
Coastal or delta	19.24	80.5	19.5	20.86	79.03	20.97			
	[3.77]	[5.30]	[5.30]	[4.55]	[9.57]	[9.57]			
Others	51.63	82.17	17.83	48.82	78.03	21.97			
Others		[1.46]	[1.46]	[2.73]	[3.13]	[3.13]			
		Regions							
North	52.97*	79.99	20.01	46.03*	75.7	24.3			
	[2.47]	[1.98]	[1.98]	[3.09]	[4.02]	[4.02]			
Centre	59.13	86.23	13.77	62.44	84.72	15.28			
Centre	[4.89]	[2.14]	[2.14]	[6.20]	[2.62]	[2.62]			
South	18.8	80.35	19.65	19.56	78.83	21.17			
		[4.30]	[4.30]	[4.31]	[9.37]	[9.37]			
Total	44.67	81.44	18.56	44.99	78.02	21.98			
IOtal	[2.45]	[1.44]	[1.44]	[2.86]	[2.91]	[2.91]			

#### Table 3.6: Self-assessment: Lack of medicine over last 12 months

"Mean corrected by sampling weights; Standard errors of mean in brackets; \*\*\* difference in mean between two groups is significant at 1%, \*\* difference in mean between two groups is significant at 5%, \* difference in mean between two groups is significant at 10%.

	P135-	P135-II communes non-P135-II commu			nunes			
	% lack of	Of whi	ch (%)	% lack of	Of wh	ich (%)		
	cooking	Not	Very	cooking	Not	Very		
	energy	often	often	energy	often	often		
Ethnicity								
non-Kinh and nonHoa	8.04	91.28	8.72	8.62	92.03	7.97		
	[1.02]	[2.90]	[2.90]	[1.72]	[2.87]	[2.87]		
Kinh and Hoa	7.82	91.99	8.01	10.28	100	0		
Kinin and Tiba		[5.23]	[5.23]	[2.10]	[0.00]	[0.00]		
	Da	aily langua	ges					
Absolutely no or little Vietnam-	8.67	92.13	7.87	11.11	94.96	5.04		
ese	[1.25]	[3.17]	[3.17]	[2.55]	[2.98]	[2.98]		
Mixed between Vietnamese	7.61*	88.26	11.74	3.46*	60.22	39.78		
and ethnic languages	[2.02]	[6.95]	[6.95]	[1.11]	[16.03]	[16.03]		
Absolutely no or little ethnic	3.41	93.16	6.84	6.34	100	0		
languages		[7.98]	[7.98]	[2.87]	[0.00]	[0.00]		
	Gender	of househ	old head		•	•		
	7.59	91.41**	8.59**	8.26	98.27**	1.73**		
Male	[0.78]	[2.71]	[2.71]	[1.32]	[0.95]	[0.95]		
E an al a	10.22	91.99	8.01	14	82.32	17.68		
Female		[7.09]	[7.09]	[3.33]	[10.05]	[10.05]		
	Geogra	aphy of co	mmunes	•		•		
	8.26	100	0	15.14	100	0		
Coastal or delta	[1.59]	[0.00]	[0.00]	[4.02]	[0.00]	[0.00]		
0.1	7.96	88.92	11.08	8.31	93.01	6.99		
Others		[3.25]	[3.25]	[1.49]	[2.57]	[2.57]		
		Regions		•	•	•		
	8.22	90.87	9.13	8.36	91.65	8.35		
North	[1.19]	[3.60]	[3.60]	[1.81]	[3.05]	[3.05]		
	6.79	88.70*	11.30*	8.29	98.15*	1.85*		
Centre	[1.43]	[4.84]	[4.84]	[2.33]	[2.04]	[2.04]		
	8.71	94.06	5.94	14.49	100	0		
South		[5.47]	[5.47]	[3.68]	[0.00]	[0.00]		
	7.96	91.52	8.48	9.11	94.66	5.34		
Total	[0.76]	[2.60]	[2.60]	[1.39]	[2.12]	[2.12]		

#### Table 3.7: Self-assessment: Lack of cooking energy over last 12 months

"Mean corrected by sampling weights; Standard errors of mean in brackets; \*\*\* difference in mean between two groups is significant at 1%, \*\* difference in mean between two groups is significant at 5%, \* difference in mean between two groups is significant at 10%.

	P135-II communes		non-P135-II communes						
		Of whi	ch (%)		Of which (%)				
	% lack of cash	Not often	Very often	% lack of cash	Not often	Very often			
Ethnicity									
non Kinh and nonHoa	89.67**	45.65**	54.35**	83.85**	54.07**	45.93**			
	[1.03]	[2.08]	[2.08]	[2.11]	[2.84]	[2.84]			
Kinh and Hoa	74.16	59.2	40.8	72.52	58.92	41.08			
		[3.88]	[3.88]	[2.91]	[3.52]	[3.52]			
	D	aily languag	jes						
Absolutely no or little Vietnam-	92.34**	42.31**	57.69**	85.24**	51.86**	48.14**			
ese	[0.87]	[2.54]	[2.54]	[2.96]	[3.69]	[3.69]			
Mixed between Vietnamese and	83.66	52.74	47.26	86.76	50.17	49.83			
ethnic languages	[2.71]	[3.42]	[3.42]	[2.65]	[3.50]	[3.50]			
Absolutely no or little ethnic	83.01	57.77*	42.23*	74.32	72.93*	27.07*			
languages		[6.52]	[6.52]	[5.05]	[5.97]	[5.97]			
	Gender	r of househo	old head						
Mala	84.52	50.11	49.89	80.57	54.62	45.38			
	[1.36]	[2.01]	[2.01]	[2.02]	[2.44]	[2.44]			
Fomalo	84.03	46.85**	53.15**	80.24	59.64**	40.36**			
remaie		[4.04]	[4.04]	[3.23]	[4.64]	[4.64]			
	Geogr	aphy of con	nmunes	_					
Coastal or dolta	68.43	74.35	25.65	66.33	77.88	22.12			
	[2.36]	[3.92]	[3.92]	[4.71]	[4.87]	[4.87]			
Others	88.92***	44.28***	55.72***	82.88***	52.67***	47.33***			
Others		[1.75]	[1.75]	[1.85]	[2.38]	[2.38]			
		Regions							
North	89.62***	46.61**	53.39**	82.03***	55.07**	44.93**			
North	[1.05]	[2.04]	[2.04]	[2.13]	[2.78]	[2.78]			
Contro	86.24	44.78	55.22	85.18	46.17	53.83			
Centre	[2.69]	[3.56]	[3.56]	[4.07]	[4.73]	[4.73]			
South	74.44	60.15	39.85	68.62	71.87	28.13			
		[5.19]	[5.19]	[4.87]	[7.25]	[7.25]			
Tetal	84.45*	49.65*	50.35*	80.52*	55.35*	44.65*			
ΤΟΙΑΙ	[1.37]	[2.00]	[2.00]	[1.89]	[2.45]	[2.45]			

#### Table 3.8: Self-assessment: Lack of cash over last 12 months

"Mean corrected by sampling weights; Standard errors of mean in brackets; \*\*\* difference in mean between two groups is significant at 1%, \*\* difference in mean between two groups is significant at 5%, \* difference in mean between two groups is significant at 10%.

# Table 3.9: Self-assessment: Lack of money to pay for educational fees over last12 months

	P135-II communes			non-P135-II communes			
	% lack of	Of wh	ich (%)	% lack	Of which (%)		
	money to pay for educa- tional fees	Not often	Very often	of money to pay for edu- cational fees	Not often	Very often	
Ethnicity							
non Kinh and non-Hoo	36.28	72.97	27.03	37.81	78.84	21.16	
	[2.29]	[2.46]	[2.46]	[2.87]	[4.03]	[4.03]	
Kiph and Haa	25.99	85.66	14.34	28.31	84.24	15.76	
		[3.25]	[3.25]	[3.11]	[2.70]	[2.70]	
	Daily	languages	;				
Absolutoly no or little Vietnamese	34.24	69.65	30.35	35.06	71.29	28.71	
Absolutely no or little vietnamese	[2.53]	[2.94]	[2.94]	[3.69]	[6.00]	[6.00]	
Mixed between Vietnamese and	39.23	79.75	20.25	47.08	87.7	12.3	
ethnic languages	[3.49]	[4.58]	[4.58]	[3.46]	[4.02]	[4.02]	
Absolutely no or little ethnic lan-	42.93*	75.83*	24.17*	31.88*	91.78*	8.22*	
guages		[7.26]	[7.26]	[4.24]	[4.04]	[4.04]	
	Gender of	household	head				
Male	33.7	76.12	23.88	35.41	79.79	20.21	
	[1.78]	[2.31]	[2.31]	[2.44]	[3.35]	[3.35]	
Female	27	78.75	21.25	32.7	82.26	17.74	
		[4.77]	[4.77]	[3.78]	[4.82]	[4.82]	
	Geograph	y of comm	unes			-	
Coastal or delta	19.37	84.66	15.34	20.01	76.01	23.99	
	[3.40]	[7.18]	[7.18]	[2.87]	[16.90]	[16.90]	
Others	36.35	74.88	25.12	37.53	80.17	19.83	
		[2.29]	[2.29]	[2.55]	[3.17]	[3.17]	
	R	egions					
North	36.29	75.57	24.43	38.6	80.77	19.23	
	[2.36]	[2.86]	[2.86]	[2.87]	[3.81]	[3.81]	
Centre	39.94	71.81	28.19	33.41	76.48	23.52	
	[3.51]	[4.20]	[4.20]	[5.18]	[4.12]	[4.12]	
South	20.78	84.55	15.45	21.06	78.13	21.87	
		[5.21]	[5.21]	[2.79]	[14.94]	[14.94]	
Total	32.76	76.42	23.58	35.01	80.13	19.87	
10141	[1.84]	[2.24]	[2.24]	[2.40]	[3.15]	[3.15]	

"Mean corrected by sampling weights; Standard errors of mean in brackets; \*\*\* difference in mean between two groups is significant at 1%, \*\* difference in mean between two groups is significant at 5%, \* difference in mean between two groups is significant at 10%.

#### Table 3.10: Self-assessment about current living conditions (%)

	P135-II communes			non-P135-II communes				
	Happy about current living stan- dards	Feel so so about current living stan- dards	Not happy about current living stan- dards	Happy about current living stan- dards	Feel so so about current living stan- dards	Not happy about current living stan- dards		
Ethnicity								
pop Kiph and popHop	11.67	31.72	56.61	13.07	31.9	55.03		
non-kinn and nonhoa	[1.17]	[1.49]	[1.72]	[2.04]	[2.39]	[3.28]		
Kinh and Llas	19.88	33.95*	46.17	20.22	40.46*	39.32		
Kinn and Hoa		[2.55]	[2.71]	[3.01]	[2.81]	[4.40]		
	Da	aily languag	jes		-			
Absolutely no or little Vietnam-	11.56	31.78	56.65	14.15	28.99	56.86		
ese	[1.22]	[1.59]	[1.95]	[2.64]	[3.07]	[4.15]		
Mixed between Vietnamese and	12.01	33.24	54.75	10.43	31.72	57.85		
ethnic languages	[2.06]	[3.10]	[3.16]	[2.04]	[4.03]	[4.45]		
Absolutely no or little ethnic	13.27	26.65***	60.08***	12.92	43.78***	43.30***		
languages		[3.37]	[3.74]	[3.07]	[4.53]	[4.80]		
	Gender	of househo	old head					
Male	14.16	32.89	52.96	15.17	34.76	50.07		
	[1.08]	[1.38]	[1.61]	[1.98]	[2.08]	[2.86]		
Fomala	15.99	29.86	54.14	15.07	32.3	52.63		
remaie		[3.92]	[3.85]	[2.31]	[4.26]	[4.81]		
	Geogra	aphy of con	nmunes					
Coostal or dalta	28.21	25.26	46.54	28.64	32.39	38.98		
	[2.90]	[3.91]	[4.00]	[6.60]	[6.82]	[8.25]		
Othors	10.69	34.64	54.67	12.77	34.7	52.52		
Others		[1.29]	[1.62]	[1.57]	[2.20]	[3.13]		
		Regions						
North	12.43	34.4	53.17	13.72	35.49	50.79		
Norun	[1.13]	[1.55]	[1.90]	[1.60]	[2.57]	[3.39]		
Contro	7.2	33.83	58.98	9.76	31.6	58.64		
	[1.13]	[2.64]	[3.27]	[4.92]	[4.72]	[8.99]		
South	23.97	28.61	47.42	26.89	32.7	40.41		
		[3.55]	[3.22]	[6.33]	[6.23]	[7.64]		
Total	14.41	32.46	53.12	15.16	34.4	50.44		
TOTAL	[1.29]	[1.46]	[1.51]	[1.79]	[2.05]	[2.93]		

"Mean corrected by sampling weights; Standard errors of mean in brackets; \*\*\* difference in mean between two groups is significant at 1%, \*\* difference in mean between two groups is significant at 5%, \* difference in mean between two groups is significant at 10%.

	P135-II communes				non-P135-II communes					
	p25/p10	p75/p25	p90/p10	GINI	p25/p10	p75/p25	p90/ p10	GINI		
Ethnicity										
non-Kinh and non- Hoa	1.50	2.56	6.28	0.41	1.51	2.74	6.93	0.41		
Kinh and Hoa	1.60	2.96	8.80	0.59	1.58	3.65	9.21	0.46		
		l	Daily langu	uages						
Absolutely no or little Vietnamese	1.49	2.62	5.97	0.39	1.47	2.69	6.30	0.40		
Mixed between Viet- namese and ethnic languages	1.57	2.48	6.79	0.41	1.52	2.72	7.45	0.42		
Absolutely no or little ethnic languages	1.63	3.04	8.64	0.50	1.40	3.36	6.18	0.42		
		Gende	er of hous	ehold he	ad					
Male	1.56	2.74	7.53	0.54	1.49	2.89	7.52	0.44		
Female	1.78	3.32	12.52	0.47	1.72	3.55	9.43	0.42		
		Geog	raphy of c	ommune	es					
Coastal or delta	1.83	2.66	9.98	0.64	1.98	3.16	8.95	0.46		
Others	1.57	2.67	7.38	0.44	1.48	2.93	7.39	0.43		
Regions										
North	1.50	2.52	6.41	0.41	1.48	2.98	7.42	0.43		
Centre	1.60	2.87	8.52	0.46	1.42	2.54	6.65	0.41		
South	1.84	2.61	9.62	0.61	1.97	3.06	9.28	0.46		
Total	1.58	2.84	8.11	0.53	1.51	3.06	7.77	0.44		

Mean corrected by sampling weights;
# Table 3.12: Decomposition of income inequality

	P13	5-II commu	nes non-P135-II commu			nunes		
	GE(0)	GE(1)	GE(2)	GE(0)	GE(1)	GE(2)		
		Ethnicity		•		•		
non-Kinh and non-Hoa	0.29	0.31	0.45	0.29	0.29	0.38		
Kinh and Hoa	0.64	1.02	5.59	0.40	0.38	0.54		
	D	aily langua	ges					
Absolutely no or little Vietnam- ese	0.26	0.28	0.39	0.27	0.26	0.32		
Mixed between Vietnamese and ethnic languages	0.30	0.30	0.40	0.30	0.30	0.40		
Absolutely no or little ethnic languages	0.45	0.47	0.76	0.31	0.31	0.45		
Gender of household head								
Male	0.52	0.88	6.38	0.34	0.35	0.55		
Female	0.42	0.38	0.47	0.33	0.28	0.31		
	Geogr	aphy of cor	mmunes					
Coastal or delta	0.79	1.26	6.86	0.45	0.40	0.63		
Others	0.34	0.37	0.59	0.31	0.32	0.42		
		Regions						
North	0.29	0.30	0.45	0.32	0.33	0.44		
Centre	0.36	0.39	0.58	0.29	0.28	0.35		
South	0.71	1.13	6.30	0.45	0.40	0.63		
Total	0.51	0.80	5.40	0.34	0.34	0.50		

#### Table 4.1: Activity rate

	P13	85-II commu	nes	non-P135-II communes		
	Poor	Non Poor	Total	Poor	Non Poor	Total
		Ethnicit	у			
	71%	73%	72%	73%	73%	72%
non-Kinh and non-Hoa	Kinh and Hoa	[0.01]	[0.01]	[0.02]	[0.01]	[0.01]
Kinh và Hoa	64%	0.64	0.64	62%	0.67	66%
	[0.02]	[0.02]	[0.02]	[0.03]	[0.02]	[0.01]
		Daily langu	ages	-		
Absolutely no or little Viet-	71%	74%	72%	72%	73%	73%
namese	[0.01]	[0.01]	[0.01]	[0.02]	[0.02]	[0.01]
Mixed between Vietnamese	72%	72%	72%	75%	71%	72%
and ethnic languages	[0.02]	[0.02]	[0.02]	[0.04]	[0.02]	[0.02]
Absolutely no or little ethnic	70%	73%	71%	74%	72%	73%
languages	[0.03]	[0.03]	[0.02]	[0.03]	[0.03]	[0.02]
	Genc	ler of house	hold head			
Mala	70%	70%	70%	72%	71%	71%
IVIAIE	[0.01]	[0.01]	[0.01]	[0.02]	[0.01]	[0.01]
Famala	66%	69%	68%	62%	70%	68%
Famale	[0.02]	[0.02]	[0.02]	[0.03]	[0.02]	[0.01]
	Geo	graphy of co	ommunes			
Coastal or dolta	63%*	63%	63%	52%	69%	65%
	[0.04]	[0.02]	[0.02]	[0.04]	[0.04]	[0.04]
Othera	71%	72%	71%	72%	71%	72%
Others	[0.01]	[0.01]	[0.01]	[0.01]	[0.01]	[0.01]
		Region	S			
North	73%	74%	73%	74%	73%	73%
NOTUT	[0.01]	[0.01]	[0.01]	[0.01]	[0.01]	[0.01]
Contro	66%	71%**	69%	68%	65%	66%
Centre	[0.01]	[0.02]	[0.01]	[0.02]	[0.02]	[0.02]
South	62%**	63%	63%	51%	70%	66%
500th	[0.03]	[0.02]	[0.02]	[0.04]	[0.03]	[0.04]
Total	70%	70%	70%	71%	70%	71%
TULAI	[0.01]	[0.01]	[0.01]	[0.01]	[0.01]	[0.01]

Mean corrected by sampling weights; Standard errors of mean in brackets; \*\*\* difference in mean between two groups is significant at 1%, \*\* difference in mean between two groups is significant at 5%, \* difference in mean between two groups is significant at 10%. The activity rate is the the ratio of occupied workers and unemployed over the working age population (6 years old and above)

#### Table 4.2: Unemployment rate

	P13	35-II commu	nes	non-P135-II communes		
	Poor	Non Poor	Total	Poor	Non Poor	Total
		Ethnicit	У			
	0.2%*	0.8%	0.5%	3	0.4%	0.2%
non-Kinh and non-Hoa	Kinh and Hoa	[0.004]	[0.002]	[0.0004]	[0.002]	[0.001]
Kinh và Hoa	1.1%**	0.8%	0.9%	0.2%	0.6%	0.5%
Kinii va hoa	[0.007]	[0.004]	[0.009]	[0.0004]	[0.003]	[0.004]
	-	Daily langu	ages	-		-
Absolutely no or little Viet-	3	0.6%	0.3%	3	0.3%	0.2%
namese	[0.0004]	[0.004]	[0.002]	[0.0004]	[0.002]	[0.001]
Mixed between Vietnamese	0.1%	0.2%	0.6%	0	0	0
and ethnic languages	[0.007]	[0.001]	[0.003]	0	0	0
Absolutely no or little ethnic	-	4.8%	2.5%	-	1.2%	0.7%
languages	-	[0.05]	[0.002]	-	[0.007]	[0.004]
	Genc	ler of house	hold head			
Mala	0.2%**	0.6%	0.4%	3	0.4%	0.3%
IVIAIE	[0.001]	[0.003]	[0.002]	[0.0002]	[0.002]	[0.001]
Famalo	2.2%*	2.2%**	2.2%	0.3%	0.4%	0.4%
Famale	[0.02]	[0.009]	[0.009]	[0.003] [0.003		[0.002]
	Geo	graphy of co	ommunes			
Coastal or dolta	2.9%	2.8%*	2.8%	0	0.7%	0.6%
	[0.02]	[0.01]	[0.08]	0	[0.001]	[0.004]
Othere	0.1%	0.2%*	0.1%	3	0.4%	0.2%
Others	[0.0006]	[0.0006]	[0.0004]	[0.0003]	[0.001]	[0.0008]
		Region	s			
North	3	٤***	٤***	0	0.5%	0.3%
Norun	[0.0002]	[0.0002]	[0.0001]	0	[0.002]	[0.0009]
Contro	0.3%	0.4%	0.4%	0.3%	0.1%	0.2%
Centre	[0.002]	[0.002]	[0.001]	[0.002]	[0.0009]	[0.0001]
South	2.3%	2.1%	2.2%*	0	0.6%	0.5%
South	[0.002]	[0.009]	[0.007]	0	[0.005]	[0.004]
Total	0.4%***	0.8%	0.6%*	3	0.4%	0.3%
IUlai	[0.002]	[0.003]	[0.002]	[0.0003]	[0.001]	[0.0009]

Mean corrected by sampling weights; Standard errors of mean in brackets; \*\*\* difference in mean between two groups is significant at 1%, \*\* difference in mean between two groups is significant at 5%, \* difference in mean between two groups is significant at 10%. The unemployment rate is the ratio of unemployed wokers over occupied workers and unemployed (active population).  $\varepsilon$ : unemployment rate < 0.05%.

#### Table 4.3: Undermeployment rate

	P13	35-II commu	nes	non-P135-II communes		nunes
	Poor	Non Poor	Total	Poor	Non Poor	Total
	-	Ethnicity	y	-		
	60%	58%	59%	59%	51%	54%
non-Kinh and non-Hoa	Kinh and Hoa	[0.02]	[0.02]	[0.04]	[0.04]	[0.03]
Kinh và Hoa	57%	52%	54%	57%	53%	54%
	[0.04]	[0.03]	[0.03]	[0.05]	[0.03]	[0.03]
		Daily langua	ages			
Absolutely no or little Viet-	60%	55%**	57%**	59%	46%	49%
namese	[0.02]	[0.03]	[0.02]	[0.04]	[0.04]	[0.02]
Mixed between Vietnamese	0.67	62%	0.65	72%	62%	0.63
and ethnic languages	[0.04]	[0.03]	[0.03]	[0.08]	[0.04]	[0.03]
Absolutely no or little ethnic	54%	62%	58%	51%	56%	54%
languages	[0.06]	[0.08]	[0.04]	[0.05]	[0.04]	[0.04]
	Gend	er of house	hold head			
Mala	59%	56%	58%	58%	51%	54%
IVIAIC	[0.02]	[0.02]	[0.02]	[0.03]	[0.03]	[0.02]
Famale	0.64	51%	56%	0.65	53%	56%
	[0.04]	[0.03]	[0.03]	[0.04]	[0.04]	[0.04]
	Geog	graphy of co	mmunes			
Coastal or delta	48%	41%	43%	35%	32%	33%
	[0.06]	[0.05]	[0.04]	[0.08]	[0.05]	[0.05]
Others	61%	60%	61%	60%	56%	57%
	[0.02]	[0.02]	[0.01]	[0.03]	[0.02]	[0.02]
		Regions	5			
North	55%	54%	55%	56%	51%	53%
	[0.02]	[0.02]	[0.02]	[0.04]	[0.02]	[0.03]
Centre	77%	72%	74%	80%	73%	70%
	[0.03]	[0.03]	[0.03]	[0.04]	[0.05]	[0.04]
South	52%*	46%	48%*	36%	34%	35%
	[0.06]	[0.04]	[0.04]	[0.07]	[0.06]	[0.05]
Total	60%	56%	58%	58%	52%	54%
Iotai	[0.02]	[0.02]	[0.02]	[0.03]	[0.03]	[0.02]

Mean corrected by sampling weights; Standard errors of mean in brackets; \*\*\* difference in mean between two groups is significant at 1%, \*\* difference in mean between two groups is significant at 5%, \* difference in mean between two groups is significant at 10%. The underemployment rate is the ratio of the occupied population working less than 35 hours a week.

#### Table 4.4: Wage earner rate

	P13	85-II commu	nes	non-P135-II communes		
	Poor	Non Poor	Total	Total Poor Non Poor		Total
		Ethnicit	у			
	5%	16%	10%	3%	17%	11%
non-Kinh and non-Hoa	Kinh and Hoa	[0.03]	[0.02]	[0.01]	[0.04]	[0.03]
Kinh và Hoa	22%***	0.33***	0.30***	8%	17%	15%
Kinii va noa	[0.05]	[0.04]	[0.03]	[0.02]	[0.03]	[0.02]
	-	Daily langu	ages			
Absolutely no or little Viet-	4%	17%	10%	3%	18%	12%
namese	[0.01]	[0.04]	[0.03]	[0.01]	[0.05]	[0.04]
Mixed between Vietnamese	8%**	13%	10%	2%	13%	9%
and ethnic languages	[0.02]	[0.02]	[0.01]	[0.01]	[0.02]	[0.02]
Absolutely no or little ethnic	4%	13%	10%	3%	13%	10%
languages	[0.02]	[0.06]	[0.03]	[0.01]	[0.06]	[0.03]
	Genc	ler of house	hold head			
Mala	7%**	20%	14%	4%	17%	12%
IVIAIC	[0.02]	[0.02]	[0.02]	[0.01]	[0.03]	[0.02]
Famalo	15%*	0.36***	0.28***	0.06	20%	16%
Famale	[0.04]	[0.05]	[0.04]	[0.02]	[0.04]	[0.03]
	Geo	graphy of co	ommunes			
Coastal or delta	51%***	40%	43%	20%	0.37	0.34
	[0.07]	[0.05]	[0.04]	[0.05]	[0.07]	[0.07]
Othors	3%	16%	10%	0.06	13%	9%
	[0.01]	[0.02]	[0.01]	[0.02]	[0.01]	[0.01]
		Region	s			
North	2%	10%	5%	3%	13%	9%
NOTUT	[0.01]	[0.01]	[0.01]	[0.01]	[0.02]	[0.01]
Contro	0.06	17%	12%	4%	12%	9%
	[0.01]	[0.02]	[0.01]	[0.01]	[0.03]	[0.02]
South	0.42***	44%	43%	19%	0.37	0.34
5000	[0.07]	[0.04]	[0.04]	[0.05]	[0.06]	[0.06]
Total	8%**	22%	16%	4%	17%	12%
TOTAL	[0.01]	[0.03]	[0.02]	[0.01]	[0.03]	[0.02]

	P13	35-II commu	nes	non-P135-II communes		nunes	
	Poor	Non Poor	Total	Poor	Non Poor	Total	
		Ethnicit	y				
	97%	84%	91%	96%	81%	87%	
non-Kinh and non-Hoa	Kinh and Hoa	[0.02]	[0.02]	[0.01]	[0.04]	[0.03]	
Kinh và Hoa	85%	70%	74%	87%	70%	75%	
	[0.04]	[0.03]	[0.03]	[0.04]	[0.03]	[0.03]	
Daily languages							
Absolutely no or little Viet-	98%	85%	92%	96%	81%	87%	
namese	[0.01]	[0.03]	[0.02]	[0.02]	[0.06]	[0.04]	
Mixed between Vietnamese	94%*	81%	87%	98%	83%	89%	
and ethnic languages	[0.02]	[0.04]	[0.02]	[0.01]	[0.03]	[0.02]	
Absolutely no or little ethnic	97%	85%	91%	96%	80%	86%	
languages	[0.01]	[0.05]	[0.02]	[0.02]	[0.04]	[0.04]	
	Geno	der of house	hold head				
Mala	96%	80%	87%	95%	80%	86%	
Male	[0.01]	[0.02]	[0.02]	[0.01]	[0.03]	[0.03]	
Famala	89%	71%	78%	0.90	68%	75%	
Famale	[0.04]	[0.04]	[0.04]	[0.03]	[0.05]	[0.04]	
	Geo	graphy of co	ommunes				
Coastal or dalta	70%	62%	64%	67%	57%	58%	
	[0.06]	[0.06]	[0.06]	[0.10]	[0.07]	[0.07]	
Othore	98%	84%	91%***	97%	82%	88%	
Others	[0.01]	[0.01]	[0.01]	[0.01]	[0.02]	[0.02]	
		Region	s				
North	98%**	87%*	93%	96%	81%	88%	
NOLUI	[0.01]	[0.02]	[0.01]	[0.01]	[0.03]	[0.02]	
Contro	96%	79%	88%	97%	87%	91%	
Centre	[0.01]	[0.03]	[0.02]	[0.01]	[0.04]	[0.03]	
Couth	75%	67%	69%	69%	58%	60%	
South	[0.05]	[0.05]	[0.04]	[0.09]	[0.07]	[0.07]	
Total	95%	79%	86%	95%	78%	84%	
IOtal	[0.01]	[0.02]	[0.02]	[0.01]	[0.03]	[0.02]	

## Table 4.5: Employment structure (Agriculture)

Table 4.6:	Employmen	t structure	(in non	household	businesses)

	P135-II communes			non-P135-II communes		
	Poor	Non Poor	Total	Poor	Non Poor	Total
	-	Ethnicit	У	-		
	1%	8%	4%	1%	11%	6%
non-Kinh and non-Hoa	Kinh and Hoa	[0.01]	[0.01]	[0.01]	[0.02]	[0.01]
Kinh và Hoa	3%	11%	9%	3%	10%	8%
	[0.01]	[0.02]	[0.01]	[0.01]	[0.02]	[0.02]
		Daily langu	ages			
Absolutely no or little Viet-	1%	7%	4%	1%	10%	6%
namese	[0.01]	[0.01]	[0.01]	[0.01]	[0.03]	[0.02]
Mixed between Vietnamese	3%	10%	7%	1%	10%	6%
and ethnic languages	[0.01]	[0.02]	[0.01]	[0.01]	[0.02]	[0.02]
Absolutely no or little ethnic	1%	7%	4%	1%	12%	7%
languages	[0.01]	[0.02]	[0.01]	[0.01]	[0.04]	[0.02]
	Geno	ler of house	hold head			
Malo	1%	9%	5%	1%	10%	7%
Iviale	[0.01]	[0.01]	[0.01]	[0.01]	[0.02]	[0.01]
Famalo	3%**	11%	8%	1%	12%	8%
Famale	[0.02]	[0.02]	[0.01]	[0.01]	[0.04]	[0.02]
	Geo	graphy of co	ommunes			
Coastal or delta	3%	9%*	8%	2%	17%	15%
	[0.02]	[0.02]	[0.02]	[0.01]	[0.05]	[0.05]
Othors	1%	9%	5%	1%	9%	6%
	[0.01]	[0.01]	[0.01]	[0.01]	[0.01]	[0.01]
		Region	s			
North	0%0	6%**	3%***	1%	10%	6%
North	[0.00]	[0.01]	[0.02]	[0.00]	[0.02]	[0.01]
Contro	2%	14%***	8%***	1%	5%	3%
Centre	[0.01]	[0.02]	[0.02]	[0.01]	[0.01]	[0.01]
South	4%	10%	8%	2%	16%	14%
	[0.02]	[0.02]	[0.02]	[0.02]	[0.05]	[0.05]
Total	1%	9%	6%	1%	10%	7%
TOLAI	[0.01]	[0.01]	[0.01]	[0.01]	[0.02]	[0.01]

# Table 4.7: Pluri-activity rate

	P135-II communes			non-P135-II communes		nunes
	Poor Non Poor Total Poor Non Po		Non Poor	Total		
		Ethnicit	у			
	52%**	56%**	54%**	42%	49%	46%
non-Kinh and non-Hoa	Kinh and Hoa	[0.02]	[0.02]	[0.04]	[0.03]	[0.03]
Kinh và Hoa	42%	47%	46%	41%	45%	44%
	[0.05]	[0.04]	[0.03]	[0.04]	[0.03]	[0.03]
	-	Daily langu	ages			
Absolutely no or little Viet-	52%**	54%**	53%**	41%	46%	44%
namese	[0.04]	[0.03]	[0.03]	[0.04]	[0.03]	[0.02]
Mixed between Vietnamese	55%	61%	58%	55%	56%	56%
and ethnic languages	[0.03]	[0.04]	[0.03]	[0.04]	[0.04]	[0.04]
Absolutely no or little ethnic	43%***	61%	52%*	23%	48%	37%
languages	[0.06]	[0.07]	[0.07]	[0.04]	[0.05]	[0.04]
	Geno	ler of house	hold head			
Malo	50%*	54%*	52%**	42%	48%	46%
	[0.03]	[0.02]	[0.02]	[0.03]	[0.02]	[0.02]
Famalo	51%*	48%	50%	40%	47%	45%
Famale	[0.04]	[0.04]	[0.03]	[0.05]	[0.04]	[0.03]
	Geo	graphy of co	ommunes			
Coastal or delta	38%	47%	45%	49%	38%	40%
	[0.07]	[0.06]	[0.05]	[0.08]	[0.05]	[0.05]
Othors	52%**	55%	53%	42%	50%	47%
	[0.03]	[0.02]	[0.02]	[0.03]	[0.02]	[0.02]
		Region	s			
North	49%**	54%*	51%*	39%	47%	44%
	[0.03]	[0.03]	[0.03]	[0.04]	[0.03]	[0.03]
Contro	58%	62%	60%	55%	53%	57%
	[0.05]	[0.03]	[0.03]	[0.04]	[0.05]	[0.04]
South	43%	46%	45%	48%	40%	41%
	[0.07]	[0.04]	[0.04]	[0.07]	[0.05]	[0.05]
Total	50%**	53%*	52%**	42%	48%	46%
IUlai	[0.03]	[0.02]	[0.02]	[0.03]	[0.02]	[0.02]

		P135-II co	ommunes			non-P135-II	communes	
	"Total	"Annual	Perennial	"Forestry	"Total	"Annual	Perennial	"Forestry
	land"	land"	land	land"	land"	land"	land	land"
			Ethnicity					
ooll non buo daiN non	19351.96	7408.11	1390.36	9665.55	16519.59	6308.54	1112.57	8020.74
	Kinh and Hoa	[485.29]	[267.68]	[1381.80]	[2224.73]	[741.48]	[296.42]	[2047.33]
	13271.69	6314.81	1826.96	2571.97	10255.71	2387.29	3083.34	2776.51
MIIII VA HOA	[2416.95]	[2430.69]	[536.84]	[713.41]	[1790.37]	[376.32]	[1924.18]	[709.11]
		De	aily languages					
A hotel i de la constante de la	20038.4	8200.05	1132.1	9916.36	17432.18	7315.89	1128.54	7770.83
	[1833.67]	[610.43]	[246.40]	[1583.15]	[3187.62]	[826.79]	[419.23]	[3031.24]
Mixed between Vietnamese and ethnic lan-	19345.67**	6264.38	2053.4	10043.52	13661.94**	5054.83	955.38	6798.72
guages	[1805.18]	[663.40]	[598.74]	[1685.75]	[1459.22]	[856.95]	[289.76]	[1193.95]
About the second s	12746.25	3407.86	1856.05	6060.43	16943.06	3969.67	1258.1	10892.19
Absolutely ITO OF Intrie ettimic languages	[2139.57]	[603.55]	[563.32]	[1891.99]	[4899.56]	[885.74]	[321.82]	[4791.61]
		Gender	of household h	lead				
	18717.47	7661.52*	1617.19	7895.45	16142.19	5587.56*	1845.45	7276.42
Male	[1462.72]	[1018.60]	[327.76]	[1072.54]	[1891.41]	[641.88]	[739.06]	[1707.87]
	8902.26**	3285.06	1033.82	3763.10*	6164.89**	2704.23	724.23	1894.75*
	[1159.88]	[368.29]	[340.39]	[918.96]	[742.88]	[424.27]	[171.47]	[478.09]
		Geogra	aphy of commu	nes				
Constal or dolta	11542.54	7836.77	146.47	58.98	7961.4	3971.11	42.17	0
	[3935.48]	[3958.08]	[85.80]	[59.38]	[1213.06]	[1144.76]	[43.32]	[0.00]
	19057.42	6890.86*	1918.06	9344.67	15606.46	5359.19*	1959.64	7373.29
CELERS	[1352.33]	[442.81]	[358.01]	[1222.37]	[1905.37]	[665.49]	[747.18]	[1704.06]

Table 4.8: Land areas by different types (M2)

			Regions					
	21867.37***	7698.26**	1266.49***	12141.29**	13780.74***	5604.61**	507.95***	6883.05**
NOUL	[1900.06]	[587.21]	[260.07]	[1787.05]	[1288.12]	[815.91]	[92.42]	[1162.88]
Control	15290.62	5206.98	2403.06	6506.29	22753.58	4496.63	7206.65	9669.26
Celline	[1871.67]	[516.98]	[837.55]	[1565.70]	[7322.45]	[881.00]	[2802.66]	[7005.39]
000 th	11854.11	7667.62	1273.03	44.44	8211.91	3990.64	456.19	0
SOUTH	[3079.40]	[2977.19]	[638.82]	[44.24]	[1132.79]	[1039.29]	[414.51]	[0.00]
Lotol Lotol	17336.29	7045.67*	1535.1	7313.96	14703.93	5171.91*	1683.83	6500.63
IOtal	[1369.88]	[873.69]	[293.21]	[1022.52]	[1660.83]	[584.59]	[638.01]	[1481.31]

## Table 4.9: Land plots by different types

		P135-II co	ommunes		n	non-P135-II communes			
	"Total land"	"An- nual land"	Peren- nial land	"For- estry land"	"Total land"	"An- nual land"	Peren- nial land	"For- estry land"	
			Ethni	city					
non Kinh and non	6.67	4.32	0.22	0.41	6.6	4.13	0.36	0.39	
Hoa	Kinh and Hoa	[0.26]	[0.03]	[0.04]	[0.39]	[0.33]	[0.08]	[0.05]	
Kinh và Hoa	3.97	1.71	0.28	0.16	4.4	2.03	0.42	0.23	
Kinin va noa	[0.32]	[0.24]	[0.07]	[0.04]	[0.34]	[0.31]	[0.10]	[0.05]	
			Daily lang	guages					
Absolutely no or little	6.66	4.41	0.18	0.39	6.32	3.98	0.25	0.34	
Vietnamese	[0.36]	[0.32]	[0.03]	[0.04]	[0.50]	[0.44]	[0.08]	[0.06]	
Mixed between Viet-	6.75	4.2	0.22	0.5	7.3	4.53	0.55	0.52	
namese and ethnic languages	[0.32]	[0.29]	[0.04]	[0.05]	[0.68]	[0.43]	[0.25]	[0.07]	
Absolutely no or little	6.75	4.08	0.68	0.39	6.71	4.19	0.53	0.36	
ethnic languages	[0.57]	[0.48]	[0.19]	[0.07]	[0.59]	[0.52]	[0.09]	[0.06]	
		Gen	der of hou	sehold he	ad				
Male	6.07	3.68	0.25	0.36	6.17	3.66	0.39	0.36	
	[0.26]	[0.23]	[0.04]	[0.03]	[0.34]	[0.29]	[0.08]	[0.04]	
Famale	3.97	2.04	0.15**	0.16	4.77	2.69	0.29**	0.24	
	[0.32]	[0.27]	[0.03]	[0.03]	[0.44]	[0.39]	[0.05]	[0.05]	
		Geo	graphy of	commune	es				
Coastal or delta	2.82	0.74	0.13	0	2.72	0.9	0.01	0	
	[0.17]	[0.09]	[0.09]	[0.00]	[0.26]	[0.25]	[0.01]	[0.00]	
Others	6.56	4.17	0.27**	0.42	6.47	3.93	0.44**	0.39	
	[0.26]	[0.22]	[0.04]	[0.04]	[0.31]	[0.28]	[0.08]	[0.04]	
			Regio	ons					
North	8.08**	5.52**	0.26	0.53	7.01**	4.52**	0.32	0.43	
	[0.28]	[0.26]	[0.05]	[0.05]	[0.37]	[0.31]	[0.08]	[0.04]	
Centre	4.74	2.47*	0.27***	0.31	4.63	1.84*	0.85***	0.24	
	[0.20]	[0.18]	[0.06]	[0.05]	[0.28]	[0.29]	[0.19]	[0.08]	
South	2.72	0.73	0.16	0	2.74	0.9	0.06	0	
	[0.14]	[0.08]	[0.08]	[0.00]	[0.24]	[0.22]	[0.05]	[0.00]	
Total	5.78	3.45	0.24*	0.33	5.97	3.52	0.38*	0.34	
iotai	[0.27]	[0.24]	[0.03]	[0.03]	[0.32]	[0.28]	[0.07]	[0.04]	

### Table 4.10: Percentage of Land in total landholdings by different types (%)

		P135-II co	ommunes			non-P135-II	commune	s
	Total %	"Annual land"	Peren- nial land	"For- estry land"	Total %	"Annual land"	Peren- nial Iand	"For- estry land"
			Ethnicit	ty				
	85.03	58.21	5.66	21.16	82.22	54.4	8.04	19.78
non-Kinh and non- Hoa	Kinh and Hoa	[1.89]	[0.95]	[1.92]		[2.79]	[1.95]	[2.53]
Kinh và Hoa	46.69	37.09	9.6	6.92*	48.56	33.39	15.17	12.58*
Kinin va noa		[2.81]	[2.13]	[1.57]		[3.54]	[4.50]	[2.84]
			Daily langu	lages				
Absolutely no or little	85.77	61.82	4.39	19.56	81.32	56.94	7.49	16.89
Vietnamese		[2.32]	[0.94]	[2.08]		[3.40]	[2.68]	[2.91]
Mixed between Viet-		52.41	6.9	26.2	85.09	52.74	5.98	26.37
namese and ethnic languages		[2.78]	[1.34]	[2.81]		[3.88]	[1.42]	[3.50]
Absolutely no or little	78.37	42.56	15.26	20.55	80.57	45.78	13.89	20.9
ethnic languages		[3.88]	[3.40]	[3.39]		[3.49]	[2.40]	[3.33]
		Gend	er of house	ehold hea	d			
Malo	77.57	52.74	7.06	17.77	78.26	49.5	9.94	18.82
Iviale		[1.90]	[1.00]	[1.66]		[2.83]	[2.16]	[2.21]
Famalo	56.51	41.87	6.35	8.29	63.37	41.23	11.12	11.02
Famale		[3.38]	[1.67]	[1.62]		[3.09]	[2.37]	[2.11]
		Geog	graphy of c	ommunes	5			
Coastal or delta	43.51	41.77	1.72	0.02	41.07	40.63	0.44	0
		[4.01]	[0.90]	[0.02]		[8.81]	[0.45]	[0.00]
Others	82.83	53.81	8.28	20.74	81.6	49.91	11.68	20.01
Others		[1.99]	[1.16]	[1.73]		[2.76]	[2.39]	[2.09]
			Region	s				
North	89.98	58.82	5.97	25.19	81.26	52.91	5.88	22.47
North		[2.18]	[1.24]	[2.03]		[2.96]	[1.14]	[2.42]
Contro	17.95	50.41*	10.52***	17.95	11.92	38.97*	31.58***	11.92
Centre		[3.09]	[2.40]	[3.30]		[5.58]	[7.60]	[3.74]
South	44.56	39.2	5.35	0.01	44.35	40.79	3.56	0
South		[3.48]	[1.92]	[0.01]		[8.00]	[3.15]	[0.00]
Total	74.61	51.21	6.96	16.44	76.11	48.31	10.11	17.69
		[1.85]	[1.00]	[1.64]		[2.62]	[2.10]	[2.07]

"Mean corrected by sampling weights; Standard errors of mean in brackets; \*\*\* difference in mean between two groups is significant at 1%, \*\* difference in mean between two groups is significant at 5%, \* difference in mean between two groups is significant at 10%.

Total % means total percentage of the three land types over total land area."

		P135-II co	ommunes			non-P135-II	communes	
	Paddy	Other food crops	Industrial crops	Fruit crops	Paddy	Other food crops	Industrial crops	Fruit crops
			Ethnicity					
	5199.46	4264.84	1232.02	57.09*	5323.79	3889.09	898.38	119.11*
	Kinh and Hoa	[379.92]	[289.41]	[16.56]	[819.04]	[595.23]	[183.10]	[28.69]
	10295.13*	1467.41**	4103.81	181.48	2152.18*	3186.25**	2822.97	268.05
Кип va ноа	[4281.88]	[387.04]	[2154.36]	[67.17]	[475.08]	[662.87]	[1482.62]	[99.09]
		Ď	aily languages					
A hotel the second state	5319.21	4857.3	1312.61	34.48**	6102.45	4435.7	994.92	78.67**
Absolutely no or little vietnamese	[438.99]	[420.51]	[390.52]	[6.11]	[1166.00]	[626.92]	[249.43]	[19.54]
Mixed between Vietnamese and ethnic lan-	5283.17	2977.97	1072.3	110.83	4178.48	2912.11	863.61	114.64
guages	[980.98]	[437.17]	[260.03]	[58.73]	[389.68]	[749.58]	[225.46]	[49.85]
Abortional circles of the control of the	3490.59	3001.75	1005.33	181.41	3958.82	3272.65	525.64	294.72
Absolutely 110 of 1100 et 1110 fatiguages	[310.01]	[950.75]	[323.66]	[125.12]	[662.75]	[736.69]	[262.32]	[80.51]
		Gender	of household	head				
	6832.6	3604.76	2018.05	95.44	4783.76	3955.12	1496.16	158.35
мане	[1404.28]	[339.70]	[755.83]	[26.03]	[733.12]	[539.25]	[500.01]	[31.84]
E comolo	5208.79	2277.98	2363.26	20	2585.06	1973.48	656.98	149.9
Lallat	[1755.76]	[368.20]	[1471.21]	[32.96]	[396.89]	[321.09]	[153.84]	[56.34]
		Geogra	aphy of comm	seur				
Constant as Jacks	22283.67	81.23	564.52	26.01	17072.6	796.18	219.23	10.69
	[8642.72]	[48.96]	[269.61]	[11.96]	[3937.20]	[675.13]	[90.53]	[7.25]
04+000	4079.45*	4058.9	2333.47	105.61	3417.80*	3963.16	1495.98	174.14
Cilidio	[242.31]	[344.43]	[849.37]	[27.96]	[278.16]	[536.20]	[489.05]	[31.21]

Table 4.11: Land areas for crops by different types (M2)

	2054.60	40EE 4E	Regions	101 07*	2257.04	01 0101	E04 00	000 41*
North	00.4085	4900.40	1137.70	10, 01	1.8.7000	43/8./2	20.18C	ZUU.47
	[259.36]	[464.89]	[329.17]	[39.11]	[258.46]	[655.84]	[122.68]	[38.49]
Contro	3835.94	2608.43	1415.98	109.24	3677.96	2533.31	4706.75	81.42
Celline	[351.84]	[418.11]	[287.08]	[38.72]	[954.51]	[615.06]	[1978.30]	[32.64]
05 ++	18802.66	393.81	5714.6	32.9	15396.69	780.13	1031.08	9.52
00011	[6563.73]	[172.58]	[3749.39]	[15.54]	[3982.25]	[586.34]	[865.43]	[6.47]
Totol	6659.48	3463.31	2054.85	92.73*	4510.54	3708.87	1391.87	157.30*
10181	[1278.23]	[324.07]	[719.23]	[23.73]	[672.09]	[497.21]	[441.86]	[28.74]

		P135-II co	ommunes		n	on-P135-II	commune	es
	Paddy	Other food crops	Indus- trial crops	Fruit crops	Paddy	Other food crops	Indus- trial crops	Fruit crops
			Ethnicity	,				
	53.87	37.49	7.52	1.12**	55.7	32.49	9.45	2.35**
non-Kinh and non-Hoa	Kinh and Hoa	[2.06]	[0.96]	[0.28]	[3.15]	[2.87]	[2.01]	[0.46]
Kinh và Hoa	55.43**	19.15***	19.67	5.75	35.74**	36.88***	18.97	8.41
	[6.04]	[3.36]	[4.02]	[1.38]	[5.38]	[4.37]	[3.95]	[1.58]
		Da	ily langua	ges				
Absolutely no or little Viet-	52.01	41.23	6.23	0.53**	53.64	35.35	9.66	1.34**
namese	[2.41]	[2.36]	[0.84]	[0.12]	[4.12]	[3.76]	[2.63]	[0.36]
Mixed between Vietnamese	57.28	30.17	10.13	2.42	60.7	26.85	10.5	1.95
and ethnic languages	[2.38]	[2.55]	[1.90]	[1.04]	[3.88]	[3.08]	[2.51]	[0.73]
Absolutely no or little ethnic	58.76	27.05	11.07	3.11*	54.98	31.24	6.41	7.37*
languages	[3.67]	[4.89]	[2.75]	[1.54]	[2.85]	[2.45]	[1.69]	[1.74]
		Gender	of househ	old head				
Mala	54.86	32.32	10.73	2.1	50.89	34.02	11.8	3.29
Male	[2.30]	[2.03]	[1.36]	[0.47]	[3.11]	[2.57]	[2.05]	[0.64]
Fomelo	49.79	31.66	13.21	5.35	48.45	30.75	12.53	8.27
Famale	[4.06]	[3.34]	[2.48]	[1.65]	[4.47]	[3.64]	[2.71]	[2.16]
		Geogra	phy of co	mmunes				
Coostal or dolta	84.31	5.22	5.83	4.64**	88.79	3.11	8.07	0.03**
Coastal of delta	[4.45]	[2.82]	[2.88]	[2.03]	[5.60]	[2.64]	[6.04]	[0.02]
Othere	49.2	36.96	11.81	2.03***	47.09	36.47	12.09	4.35***
Others	[1.94]	[1.88]	[1.48]	[0.43]	[2.93]	[2.48]	[2.15]	[0.68]
			Regions					
North	47.31	43.1	7.88	1.71***	48.02	40.49	6.73	4.77***
NOTUT	[2.13]	[2.30]	[1.15]	[0.52]	[3.00]	[2.83]	[1.11]	[0.82]
Contro	54.7	27.5	14.79**	3.01	44.68	22.2	30.16**	2.96
Centre	[3.95]	[2.66]	[2.70]	[0.86]	[8.47]	[4.01]	[7.23]	[1.15]
South	74.15	7.7	14.53	3.62**	81.38	4.18	14.41	0.03**
30001	[6.21]	[2.81]	[5.35]	[1.56]	[9.26]	[2.30]	[9.07]	[0.02]
Total	54.32	32.25	10.99	2.44*	50.59	33.62	11.89	3.91*
TOTAL	[2.29]	[2.03]	[1.36]	[0.46]	[3.06]	[2.50]	[2.01]	[0.64]

	-							
		P135-II cc	ommunes			non-P135-II	communes	
	Paddy	Other food crops	Industrial crops	Fruit crops	Paddy	Other food crops	Industrial crops	Fruit crops
			Ethnicity					
	3109.73	2384.22	621.46	169.42**	3400.04	2947.08	728.82	326.91**
	Kinh and Hoa	[313.79]	[122.87]	[32.28]	[515.15]	[654.20]	[190.30]	[59.90]
	6208.35	714.35**	2010.94	259.99	1456.2	1896.75**	1288.24	460.75
	[2888.63]	[202.05]	[1104.25]	[84.18]	[311.29]	[443.97]	[366.51]	[97.38]
		Da	ily languages					
	3109.69	2479.41	588.87	111.58**	3802.27	3231.76	828.01	257.71**
	[243.79]	[323.48]	[146.85]	[11.69]	[800.09]	[691.89]	[279.71]	[72.87]
Mixed between Vietnamese and ethnic lan-	3426.81	2223.83	722.02	271.87	2774.58	2222.93	686.36	292.12
guages	[602.29]	[517.05]	[147.61]	[86.40]	[210.77]	[636.00]	[134.69]	[78.40]
	2098.73	2103.79	627.19	500.05	2641.66	2834.99	344.09	701.41
Absolutely no or nue eurinc languages	[217.24]	[671.47]	[197.49]	[254.66]	[283.53]	[845.91]	[108.47]	[154.42]
		Gender	of household I	head				
CICM	4457.46	1995.69	1191.53	210.74**	3055.2	2872.68	940.44	383.37**
Male	[1158.68]	[259.49]	[453.78]	[45.08]	[470.46]	[556.60]	[205.40]	[64.39]
	2215.83	789.77*	431.33	131.47*	1540.96	1291.82*	610.52	264.70*
Lallae	[578.32]	[157.74]	[141.47]	[45.48]	[278.32]	[249.16]	[178.64]	[50.83]
		Geogra	phy of commu	ines				
ctotal or dotte	10489.65	96.53	228.34	32.56	6010.96	548.34	112.9	-48.39
	[4478.31]	[75.73]	[114.53]	[18.67]	[2728.23]	[511.11]	[47.46]	[82.37]
Oth Asso	2426.6	2317.76	1333.53	247.21**	2293.56	3028.44	1031.05	442.45**
Curers	[154.74]	[276.85]	[516.34]	[49.13]	[162.21]	[565.96]	[215.47]	[60.29]

Table 4.13: Crop income by different types ('000 VND)

			Regions					
	2898.75	3080.89	497.25	315.94*	2486.7	3422.04	504.7	500.10*
NOR	[180.31]	[404.03]	[77.56]	[77.87]	[189.22]	[702.43]	[87.57]	[75.31]
Control C	1753.47	1385.78	2017.84	179.1	1629.76	1696.75	2836.79	249.5
Celline	[182.34]	[258.47]	[642.63]	[33.51]	[233.70]	[479.65]	[735.85]	[45.75]
00 01 14	8306.76	151.48	1311.42	27.82	5677.84	529.93	397.37	-44.78
000111	[3423.80]	[69.22]	[1344.01]	[13.90]	[2508.04]	[466.28]	[315.19]	[74.89]
Totol	4143.81	1826.95	1085.16	199.65**	2832.96	2640.67	892.02	365.95**
IOIAI	[991.23]	[240.25]	[404.95]	[39.73]	[430.17]	[496.43]	[187.53]	[57.47]

### Table 4.14: Crop income as percentage of total income (%)

		P135-II co	ommunes		n	on-P135-II	commune	es
	Paddy	Other food crops	Indus- trial crops	Fruit crops	Paddy	Other food crops	Indus- trial crops	Fruit crops
			Ethni	city				
non Kinh and non	22.95	17.24	3.47	1.13***	21.59	16.59	4.35	2.20***
Hoa	Kinh and Hoa	[1.55]	[0.49]	[0.14]	[1.43]	[2.44]	[0.87]	[0.38]
Kinh và Hoa	15.86**	4.22***	6.31	1.45*	8.84**	10.01***	6.54	4.11*
Kinin va hoa	[2.71]	[0.93]	[1.38]	[0.47]	[1.67]	[1.98]	[1.72]	[1.53]
	-		Daily lang	guages		-		
Absolutely no or little	23.7	19.59	3.04	0.92**	21.91	18.97	4.26	1.92**
Vietnamese	[1.25]	[1.86]	[0.46]	[0.09]	[1.79]	[3.05]	[1.11]	[0.43]
Mixed between Viet-	21.36	12.06	4.79	1.47	21.89	12.3	5.24	1.5
namese and ethnic languages	[1.41]	[1.66]	[0.90]	[0.33]	[2.53]	[2.22]	[1.18]	[0.26]
Absolutely no or little	21.56	12.72	3.58	2.72	19.08	13.31	3.01	4.69
ethnic languages	[2.22]	[3.01]	[2.42]	[1.65]	[2.25]	[2.54]	[1.05]	[1.22]
		Gen	der of hou	sehold he	ad			
Mala	21.68*	13.8	4.59	1.28**	18.63*	15.61	5.03	2.95**
Iviale	[1.16]	[1.29]	[0.64]	[0.26]	[1.36]	[2.02]	[0.92]	[0.64]
Famalo	13.89	7.34	3.37	1	13.45	9.23	4.78	1.64
Famale	[1.80]	[1.27]	[0.88]	[0.33]	[2.04]	[1.50]	[1.34]	[0.30]
		Geo	ography of	commune	es			
Coastal or delta	22.32	0.92	1.15	0.16	16.59	1.64	0.49	-0.12
	[3.73]	[0.63]	[0.54]	[0.11]	[5.88]	[1.53]	[0.32]	[0.17]
Others	20.16	16.28	5.35	1.55**	17.87	16.97	5.74	3.29**
Others	[1.12]	[1.34]	[0.71]	[0.27]	[1.38]	[2.04]	[0.97]	[0.62]
			Regio	ons				
North	23.68**	21.09	3.25	1.94**	19.23**	19.09	3.45	3.75**
North	[1.17]	[1.76]	[0.49]	[0.42]	[1.59]	[2.50]	[0.60]	[0.79]
Centre	16.66	10.68	7.76*	1.18*	13.04	9.63	13.41*	1.71*
Centre	[1.77]	[1.52]	[1.52]	[0.15]	[2.29]	[2.02]	[2.93]	[0.23]
South	18.88	1.37	3.65	0.16	16.3	1.87	2.03	-0.11
	[3.19]	[0.60]	[1.48]	[0.08]	[5.36]	[1.40]	[1.70]	[0.15]
Total	20.59	12.89	4.42	1.24**	17.87	14.67	4.99	2.76**
iotai	[1.15]	[1.27]	[0.62]	[0.22]	[1.39]	[1.89]	[0.86]	[0.55]

		P1	35-II commun	es			-uou-l	P135-II comm	unes	
	Seeds	Chemical fertilizer	Bio fertil- izer	Insecti- cides	Other	Seeds	Chemical fertilizer	Bio fertil- izer	Insecti- cides	Other
				Ethnic	ity					
	397.86	779.59	139.33	153.81	0.21	486.13	1007.31	153.95	194.51	0.22
non-Kinh and non-Hoa	Kinh and Hoa	[83.61]	[12.55]	[23.71]	[0.02]	[84.54]	[175.64]	[16.47]	[44.34]	[0.03]
	652.55*	3746.73*	114.59	672.33**	0.15	312.96*	1275.49*	160.32	239.39**	0.22
Kinn va Hoa	[164.61]	[1369.12]	[30.03]	[195.81]	[0.03]	[51.96]	[230.77]	[28.66]	[46.70]	[0.04]
				Daily lang	uages					
Absolutely no or little Vietnam-	410.03	723.67	134.47	122.23	0.16	572.95	1110.03	141.29	204.98	0.17
ese	[32.25]	[110.75]	[15.54]	[22.47]	[0.02]	[121.21]	[267.41]	[21.10]	[58.91]	[0.03]
Mixed between Vietnamese	394.18	892.07	156.13	212.22	0.33	324.06	795.06	163	120.55	0.3
and ethnic languages	[71.24]	[205.19]	[13.01]	[84.14]	[0.04]	[26.89]	[90.94]	[14.25]	[13.83]	[90.0]
Absolutely no or little ethnic	293.81	1074.04	138.4	314.01	0.35	372.19	924.83	195.59	279.97	0.31
languages	[31.42]	[207.17]	[21.34]	[78.72]	[0.06]	[65.85]	[130.36]	[38.79]	[75.88]	[90.0]
			ğ	ender of hous	ehold head					
	510.83	1906.08	139.75	339.8	0.19	472.15	1164.93	165.01	225.41	0.22
Iviale	[69.71]	[573.15]	[14.64]	[84.03]	[0.02]	[74.77]	[175.31]	[16.45]	[41.74]	[0.02]
	310.9	932.03	77.72	247.25*	0.19	223.18	624.02	102.32	104.08*	0.23
רמוומפ	[70.45]	[198.45]	[17.70]	[82.50]	[0.04]	[32.20]	[106.50]	[15.59]	[21.53]	[0.05]
			5	eography of o	sommunes					
	851.82	4056.11	6.4	828.17	0.04*	941.02	2084.93	0	506.87	0.01*
	[234.80]	[2096.04]	[6.53]	[304.11]	[0.02]	[396.01]	[884.69]	[00.0]	[190.65]	[0.01]
	386.53	1159.47	164.78	192.44	0.23	356.7	929.24	180.14	159.92	0.25
Outers	[40.84]	[270.35]	[14.36]	[35.11]	[0.02]	[26.54]	[104.54]	[14.59]	[22.70]	[0.02]

Table 4.15: Crop expenses by ddiferent types ('000 VND)

				Region	IS					
	392.01	794.99	180.12	138.71	0.24	376.98	826.1	186.59	137.11	0.25
NOT	[28.44]	[66.69]	[13.23]	[24.23]	[0.02]	[31.37]	[92.05]	[16.20]	[20.67]	[0.03]
() ()	304.96	720.56	167.23	149.65	0.27	288.32	1307.12	165.97	235.02	0.24
Cellie	[21.60]	[179.82]	[35.43]	[64.21]	[0.05]	[45.40]	[326.19]	[34.09]	[69.54]	[0.05]
4+ 100	797.65	4321.75	17.49	798.22	0.04	891.31	2022.29	0.46	496.42	0.02
South	[200.20]	[1659.02]	[10.18]	[228.52]	[0.01]	[365.19]	[807.04]	[0:50]	[173.95]	[0.01]
Totol	482.86	1769.79	131.07	326.85	0.19	435.61	1085.54	155.81	207.6	0.22
10(4)	[59.40]	[487.97]	[13.79]	[71.73]	[0.02]	[65.93]	[156.77]	[15.20]	[36.85]	[0.03]

Table 4.16:	Values of	of (	Crop	that	were	traded	(%)	)
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		P135-II co	mmunes		n	on-P135-II	commune	s
	110/		Sold to		"0/		Sold to	
	traded (%)"	Individu- al traders	Retail	Other	traded (%)"	Indi- vidual traders	Retail	Other
			Ethnic	ity				
non Kink and non	23.54**	75.84	16.23	7.93	33.54**	78.21	14.88	6.91
hon-Kinn and hon- Hoa	Kinh and Hoa	[2.16]	[1.90]	[1.36]	[3.45]	[2.58]	[1.97]	[1.07]
Kinh và Hoa	49.92	77.01	16.89	6.1	50.68	78.04	12.35	9.61
Kinin va noa	[4.51]	[4.44]	[4.26]	[1.38]	[5.13]	[4.10]	[3.32]	[2.51]
			Daily lang	juages				
Absolutely no or little	23.11***	74.87	16.17	8.96	36.34***	79.43	13.76	6.81
Vietnamese	[2.42]	[2.46]	[2.12]	[1.49]	[4.44]	[3.09]	[2.45]	[1.26]
Mixed between Viet-	24.71	78.06	15.47	6.47	25.13	74.1	19.67	6.23
namese and ethnic languages	[2.37]	[3.03]	[2.75]	[1.72]	[3.29]	[3.93]	[3.16]	[2.03]
Absolutely no or little	24.33**	78.07	18.63	3.3	35.94**	79.87	12.22	7.91
ethnic languages	[4.95]	[8.70]	[8.94]	[1.92]	[3.00]	[5.66]	[3.54]	[3.07]
		Genc	der of hou	sehold he	ad			
Malo	31.10*	76.95	15.58	7.47	37.96*	78.67	13.75	7.58
Wale	[2.28]	[2.00]	[1.80]	[1.10]	[3.25]	[2.32]	[1.80]	[1.08]
Fomolo	31.06	70.27	23.89	5.85	37.77	74.55	17.53	7.92
Famale	[3.79]	[5.30]	[5.18]	[1.51]	[4.01]	[4.51]	[3.92]	[2.25]
		Geo	graphy of	commune	es			
Coastal or delta	65.95	93.4	3.43*	3.17	75.88	84.41	11.35*	4.24
	[4.75]	[2.10]	[1.79]	[1.49]	[7.18]	[5.84]	[4.04]	[2.42]
Others	25.48***	72.67	19.07	8.26	35.16***	77.4	14.54	8.06
	[2.04]	[2.37]	[2.30]	[1.20]	[3.04]	[2.60]	[2.05]	[1.16]
			Regio	ns				
North	19.02***	67.10*	24.62*	8.28	31.67***	75.04*	16.49*	8.46
North	[2.03]	[3.45]	[3.46]	[1.72]	[2.94]	[3.13]	[2.49]	[1.40]
Contro	32.05	81.05	11.73	7.22	46.66	86.03	6.97	7
Centre	[3.85]	[2.80]	[2.02]	[1.51]	[8.75]	[3.48]	[2.39]	[1.81]
South	66.33	91.3	3.28**	5.42	75.42	84.62	11.61**	3.77
	[4.35]	[2.02]	[1.44]	[1.81]	[6.36]	[5.07]	[3.52]	[2.16]
Total	31.10*	76.24	16.46	7.29	37.93*	78.16	14.21	7.62
IUlai	[2.24]	[2.16]	[2.00]	[1.03]	[3.15]	[2.37]	[1.86]	[1.07]

## Table 4.17: Paddy trade (%)

		P135-II cor	mmunes		I	non-P135-II o	communes	6
	"%		Sold to		"%		Sold to	
	traded (%)"	Individual traders	Retail	Other	traded (%)"	Individual traders	Retail	Other
			Ethnic	city	•			
non Kinh and non	7.48	81.23	11.72	7.04	9.86	79.53	13.54	6.93
Hoa	Kinh and Hoa	[2.77]	[2.51]	[1.58]	[3.18]	[3.62]	[3.20]	[1.84]
Kinh và Hoa	30.51**	90.73	6.36	2.92	12.37**	83.73	10.18	6.09
Rinn va rioa	[6.33]	[3.92]	[3.26]	[1.77]	[5.33]	[8.70]	[6.80]	[3.52]
			Daily lang	guages				
Absolutely no or little	8.04	81.79	10.68	7.52	12.46	81.55	10.71	7.73
Vietnamese	[2.10]	[3.07]	[2.66]	[2.05]	[4.80]	[4.57]	[3.87]	[2.75]
Mixed between Viet-	6.5	82.38	9.66*	7.96	4.59	74.52	20.63*	4.85
namese and ethnic languages	[1.48]	[4.94]	[3.78]	[3.25]	[0.85]	[4.68]	[4.55]	[2.21]
Absolutely no or little	4.81	73.88	26.12	0	8.25	78.42	14.95	6.63
ethnic languages	[1.86]	[14.68]	[14.68]	[0.00]	[2.39]	[7.17]	[6.10]	[5.33]
		Geno	der of hou	sehold hea	ad			
Male	13.02	85.33	8.85	5.82	10.51	80.31	12.92	6.77
Ividie	[2.38]	[2.70]	[2.10]	[1.52]	[3.17]	[3.62]	[3.08]	[1.81]
Famale	13.87	85.11	14.44	0.45	8.83	79.89	13.22	6.89
	[4.80]	[8.07]	[8.03]	[0.45]	[3.51]	[11.58]	[8.05]	[4.13]
		Geo	graphy of	commune	s			
Coastal or delta	67.33	98.12	0	1.88	75.5	94.02	2.43	3.54
	[5.51]	[1.41]	[0.00]	[1.41]	[7.62]	[3.18]	[2.66]	[2.82]
Others	4.04	72.46	19.05	8.49	4.2	72.86	18.6	8.54
	[0.65]	[3.67]	[3.60]	[2.14]	[0.55]	[3.69]	[3.15]	[2.10]
			Regio	ons				
North	3.53	68.46	24.87	6.67	4.19	70.68	21.28	8.04
	[0.52]	[4.26]	[4.53]	[1.68]	[0.60]	[4.14]	[3.58]	[2.36]
Centre	2.4	75.25	5.41	19.35	4.16	84.17	3.97	11.85
Centre	[0.72]	[9.97]	[3.21]	[10.00]	[1.52]	[5.34]	[2.26]	[4.83]
South	60.99	97.71	0	2.29	70.9	94.1	2.4	3.5
00001	[5.20]	[1.38]	[0.00]	[1.38]	[8.47]	[3.07]	[2.56]	[2.73]
Total	13.09	85.31	9.42	5.27	10.32	80.27	12.94	6.78
IUlai	[2.43]	[2.78]	[2.25]	[1.40]	[3.01]	[3.61]	[3.03]	[1.69]

## Table 4.18: Other food crop trade (%)

		P135-II co	mmunes		n n	on-P135-II	commune	s
	110/		Sold to		"0/		Sold to	
	traded (%)"	Individual traders	Retail	Other	traded (%)"	Indi- vidual traders	Retail	Other
	I	<b></b>	Ethnic	city	<b></b>			
	25.10**	77.92	15.84	6.24	36.88**	78.06	15.96	5.98
non-Kinn and non- Hoa	Kinh and Hoa	[2.54]	[2.24]	[1.18]	[4.28]	[4.02]	[3.73]	[1.32]
Kinh và Hoa	29.05**	68.38	27.03	4.58*	46.03**	76.47	13.5	10.02*
	[5.59]	[7.36]	[7.47]	[1.65]	[5.57]	[4.39]	[4.50]	[2.81]
			Daily lang	guages				
Absolutely no or little	25.40**	78.92	14.49	6.59	39.20**	78.12	15.6	6.28
Vietnamese	[2.92]	[2.72]	[2.26]	[1.35]	[5.18]	[5.26]	[5.16]	[1.73]
Mixed between Viet-	24.12	75.87	19.25	4.88	26.45	74.43	21.48	4.08
namese and ethnic languages	[3.32]	[4.50]	[4.29]	[1.77]	[4.36]	[5.40]	[5.16]	[2.02]
Absolutely no or little	25.68*	77.57	15.62	6.82	43.40*	82.51	10.33	7.16
ethnic languages	[7.89]	[8.59]	[9.18]	[3.36]	[5.03]	[6.46]	[4.37]	[3.42]
		Geno	der of hou	sehold he	ad			
Male	25.85***	77.44	17.01	5.55	39.51***	77.91	14.83	7.25
	[2.43]	[2.45]	[2.22]	[1.04]	[3.83]	[3.39]	[3.16]	[1.34]
Famale	25.58	63.45	26.94	9.61	35.35	75.47	19.47	5.06
	[3.51]	[6.64]	[6.78]	[2.73]	[4.94]	[6.52]	[6.89]	[2.16]
		Geo	graphy of	commune	es			
Coastal or delta	72.45	55	34.91	10.1	98.8	33.33	66.67	0
	[19.91]	[22.48]	[21.27]	[11.44]	[0.00]	[0.00]	[0.00]	[0.00]
Others	25.30***	77.21	16.97	5.82	38.52***	79.55	13.07	7.38
	[2.41]	[2.54]	[2.37]	[1.03]	[3.62]	[3.06]	[2.70]	[1.29]
			Regio	ons				
North	20.55***	74.52	19.79	5.69	38.06***	79.54	13.56	6.9
	[2.79]	[3.47]	[3.23]	[1.21]	[4.02]	[3.56]	[3.22]	[1.34]
Centre	35.57	82.01	12.75	5.24	40.4	80.07	10.02	9.91
	[4.65]	[3.81]	[3.71]	[1.62]	[8.58]	[5.00]	[2.54]	[4.16]
South	68.54	68.49**	18.59***	12.92	93.45	35.70**	64.30***	0
	[16.32]	[13.64]	[12.07]	[9.17]	[8.39]	[3.20]	[3.20]	[0.00]
Total	25.82***	76.13	76.13	5.93	39.02***	77.65	77.65	7.02
10101	[2.36]	[2.54]	[2.54]	[1.03]	[3.63]	[3.33]	[3.33]	[1.24]

## Table 4.19: Industrial crop trade (%)

		P135-II col	mmunes		r	non-P135-II	commune	S
	"%		Sold to		"%		Sold to	
	traded (%)"	Individual traders	Retail	Other	traded (%)"	Individu- al traders	Retail	Other
			Ethnic	ity				
non Kinh and non	40.42**	67.01*	19.76	13.23*	53.50**	77.99*	17.08	4.93*
Hoa	Kinh and Hoa	[4.38]	[3.09]	[4.23]	[5.13]	[3.70]	[3.21]	[1.51]
Kinh và Hoa	67.56	68.57	21.45	9.98	70.04	76.55	10.03	13.42
	[5.06]	[6.57]	[7.14]	[2.68]	[6.35]	[7.09]	[3.54]	[5.47]
			Daily lang	juages				
Absolutely no or little	35.88*	64.25*	21.26	14.49**	49.00*	77.70*	17.75	4.55**
Vietnamese	[3.56]	[4.67]	[3.64]	[4.09]	[6.58]	[4.99]	[4.64]	[1.80]
Mixed between Viet-	56.3	75.64	12.26	12.1	54.81	78.56	17.49	3.95
namese and ethnic languages	[5.86]	[6.44]	[3.57]	[5.96]	[7.30]	[5.36]	[5.05]	[1.80]
Absolutely no or little	32.96***	58.3	35.86	5.84	69.04***	77.31	14.73	7.96
ethnic languages	[8.39]	[14.65]	[14.39]	[4.53]	[6.72]	[6.81]	[4.71]	[4.82]
		Geno	ler of hous	sehold he	ad			
Male	48.33	68.10*	19.29	12.61	56.45	77.51*	15.22	7.27
	[3.33]	[3.56]	[3.05]	[3.01]	[4.58]	[3.65]	[2.76]	[2.25]
Famale	52.21**	63.8	30.07	6.14	68.51**	77.83	13.04	9.13
	[5.23]	[9.23]	[9.52]	[2.64]	[5.92]	[6.42]	[4.35]	[3.43]
		Geo	graphy of	commune	s			
Coastal or delta	62.53	57.22	31.56	11.23	51.72	23.48	51.65	24.87
	[10.49]	[12.84]	[11.43]	[8.57]	[16.83]	[24.05]	[29.18]	[25.03]
Others	47.69*	68.66*	19.29	12.05	57.88*	77.95*	14.58	7.47
	[3.45]	[4.05]	[3.74]	[3.02]	[4.56]	[3.54]	[2.52]	[2.14]
			Regio	ns				
North	33.12**	54.55**	30.78	14.67	47.41**	70.77**	19.67	9.56
	[3.53]	[6.00]	[6.27]	[5.22]	[4.97]	[4.93]	[3.40]	[3.17]
Centre	75.20**	85.78*	6.5	7.73	90.28**	92.57*	3.72	3.71
	[4.69]	[2.79]	[1.56]	[2.38]	[4.17]	[2.49]	[2.02]	[1.30]
South	77.54	68.47	18.85	12.68	70.59	56.94	31.76	11.3
	[8.55]	[6.60]	[6.53]	[5.07]	[19.02]	[21.99]	[17.32]	[13.40]
Total	48.71*	67.64*	67.64*	11.91	57.89*	77.55*	77.55*	7.52
Iotai	[3.24]	[3.74]	[3.74]	[2.78]	[4.43]	[3.54]	[3.54]	[2.09]

## Table 4.20: Fruit Crop trade (%)

		P135-II co	ommunes		r	on-P135-I	I commune	s
	"%		Sold to		"%		Sold to	
	traded (%)"	Indi- vidual traders	Retail	Other	traded (%)"	Indi- vidual traders	Retail	Other
	I	I	Ethni	icity	I			
non-Kinh and non-	11.86***	47.73**	41.24*	11.03	29.70***	62.47**	27.85*	9.67
Ноа	Kinh and Hoa	[5.48]	[5.14]	[2.68]	[4.36]	[5.05]	[5.04]	[2.53]
Kinh và Hoa	29.82	53.17	43.24**	3.59*	36.74	65.13	24.81**	10.07*
	[4.13]	[6.03]	[5.94]	[1.47]	[4.58]	[6.67]	[5.84]	[3.11]
			Daily lan	guages				
Absolutely no or little	8.94***	36.75***	49.99***	13.27	23.63***	63.42***	26.96***	9.62
Vietnamese	[1.21]	[6.01]	[5.79]	[3.50]	[4.63]	[6.29]	[6.23]	[2.20]
Mixed between Viet-	15.68	51.3	36.36	12.35	20.93	57.66	28.33	14.01
namese and ethnic languages	[2.66]	[6.41]	[6.40]	[4.13]	[5.48]	[10.29]	[8.06]	[5.03]
Absolutely no or little	31.12**	86.34	13.66	0.00*	60.68**	64.86	28.56	6.59*
ethnic languages	[10.87]	[8.07]	[8.07]	[0.00]	[7.84]	[10.11]	[8.72]	[3.47]
		Gen	der of hou	usehold he	ad			
Male	16.13***	49.96**	42.55**	7.48	31.46***	63.84**	26.71**	9.45
Iviale	[1.86]	[4.56]	[4.44]	[1.81]	[4.03]	[4.57]	[4.48]	[2.20]
Famale	20.74*	52.21	39.47	8.33	31.94*	59.17	28.74	12.1
	[3.82]	[10.61]	[10.31]	[3.26]	[4.65]	[8.70]	[6.97]	[5.37]
		Ge	ography o	f commun	es			
Coastal or delta	25.45*	46.53*	53.47*	0	49.21*	0.00*	100.00*	0
	[10.60]	[18.83]	[18.83]	[0.00]	[0.47]	[0.00]	[0.00]	[0.00]
Others	16.33***	51.12**	40.71***	8.17	31.91***	64.86**	25.30***	9.84
	[1.93]	[4.61]	[4.34]	[1.84]	[3.85]	[4.32]	[3.89]	[2.07]
			Regi	ons				
North	14.81***	47.22**	42.58**	10.2	33.79***	65.19**	24.00**	10.81
	[2.35]	[6.57]	[5.97]	[2.61]	[4.46]	[4.73]	[4.08]	[2.32]
Centre	21.47	58.47	37.27	4.26	22.11	62.64	33.92	3.43
	[3.01]	[5.92]	[6.13]	[1.66]	[3.71]	[10.19]	[10.97]	[1.67]
South	21.92*	48.07**	51.93**	0	43.60*	0.00**	100.00**	0
	[9.36]	[17.35]	[17.35]	[0.00]	[7.58]	[0.00]	[0.00]	[0.00]
Total	16.62***	50.25**	50.25**	7.59	31.52***	63.25**	63.25**	9.79
iotai	[1.88]	[4.43]	[4.43]	[1.71]	[3.74]	[4.45]	[4.45]	[2.03]

# Table 4.21: Husbandary income ('000 VND)

		P135-II co	ommunes			non-P135-II	communes	6
	Pig	Cow	Chicken	Other	Pig	Cow	Chicken	Other
			Et	thnicity				
non-Kinh and	619.76	283.01	532.59	3373.85	595.25	231.56	666.11	3472.8
non-Hoa	Kinh and Hoa	[37.53]	[33.31]	[294.17]	[63.94]	[41.74]	[79.08]	[331.26]
Kinh và Hoa	724.23	157.29	419.18**	3127.58	616.52	257.6	814.67**	4807.67
	[151.27]	[53.96]	[57.90]	[575.41]	[96.52]	[75.79]	[154.72]	[921.55]
			Daily	languages				
Absolutely no	496.37	269.41	494.4	2833.07	483.47	242.74	548.22	2702.74
or little Viet- namese	[85.24]	[38.88]	[37.71]	[202.88]	[68.01]	[53.94]	[70.03]	[258.93]
Mixed between	830	336.87	625.19	4218.24	755.62	250.66	681.3	3785.05
Vietnamese and ethnic languages	[162.26]	[80.79]	[50.83]	[575.26]	[126.27]	[68.42]	[50.79]	[415.43]
Absolutely no	1211.66	270.08	571.61	6168.78	734.12	147.29	1111.9	6116.83
or little ethnic languages	[521.83]	[172.16]	[112.76]	[2486.16]	[154.11]	[68.24]	[391.82]	[1341.92]
			Gender of	household	head			
Mala	680.46	265.6	515.91**	3476.21	618.03	267.57	735.11**	4039.65
Iviale	[85.20]	[35.28]	[32.46]	[304.24]	[56.47]	[42.71]	[97.85]	[486.33]
Famale	495.8	90.16	364.64*	2157.31	505.14	73.96	560.27*	2830.73
- Tamale	[132.02]	[26.26]	[68.91]	[386.87]	[146.00]	[31.35]	[76.82]	[469.01]
			Geograph	y of commu	unes			
Coastal or delta	511.13	17.04	225.58***	1934.9	305.22	191.33	34.53***	1466.57
	[208.31]	[25.46]	[61.59]	[533.55]	[152.30]	[146.06]	[10.22]	[576.38]
Others	681.14	306.94	561.57**	3618.94	643.06	242.78	818.53**	4234.04
	[77.56]	[36.18]	[31.28]	[302.08]	[56.38]	[38.01]	[94.78]	[483.22]
		-	R	egions				
North	862.64	293.95	654.45*	4479.1	683.17	209.9	888.46*	4519.29
	[112.42]	[46.69]	[33.88]	[422.29]	[66.29]	[37.89]	[118.97]	[579.52]
Centre	506.3	345.47	530.77	2750.03	529.01	360.06	600.84	3347.43
	[74.17]	[50.27]	[42.88]	[280.10]	[117.10]	[103.73]	[71.31]	[919.81]
South	397.85	76.95	179.20***	1645.56	284.44	203.58	33.07***	1429.69
	[156.01]	[50.82]	[47.21]	[421.08]	[139.25]	[133.49]	[9.41]	[524.21]
Total	654.62	24368.46	241.05	3291.67	601.46	11976.21	239.16	3862.22
, otai	[76.41]	[9642.02]	[31.91]	[279.22]	[54.92]	[3504.33]	[37.20]	[437.34]

## Table 4.22: Husbandary cost of proudction ('000 VND)

		P135-II co	mmunes		n	on-P135-II	commune	S
	Seeds	Food	Medi- cine	Other	Seeds	Food	Medi- cine	Other
			Ethn	icity	-	-		
non-Kinh and non-	614.98	1051.73	14.81	158.26	566.05	1124.81	27.96	136.14
Ноа	Kinh and Hoa	[147.44]	[1.79]	[14.66]	[57.37]	[147.08]	[8.60]	[15.75]
Kinh và Hoa	507.01*	1089.21	30.11*	143.58	896.67*	1851.75	76.07*	224.22
	[105.33]	[229.48]	[7.47]	[24.97]	[187.61]	[513.15]	[25.58]	[67.23]
			Daily lar	nguages	-	-		
Absolutely no or	517.09	792.44	12.08	130.01	461.79	749.1	17.56	100.09
little Vietnamese	[48.57]	[63.99]	[2.21]	[11.58]	[65.20]	[82.65]	[2.76]	[15.38]
Mixed between	812.2	1333.69	20.58	227.11	614.55	1165.81	13.14	181.09
Vietnamese and ethnic languages	[139.71]	[237.82]	[4.37]	[31.70]	[80.85]	[157.97]	[2.91]	[24.94]
Absolutely no or	1001.23	2735.68	23.3	231.54	931.89	2631.63	96.49	222.88
little ethnic lan- guages	[262.72]	[1540.96]	[5.30]	[100.00]	[171.01]	[691.23]	[53.54]	[38.32]
		Ger	nder of ho	usehold h	ead			
Male	613.28	1128.24	20.66	162.45	690.32	1395.88	44.29	172.87
Ividie	[56.45]	[138.83]	[3.00]	[14.34]	[79.81]	[265.61]	[14.73]	[26.85]
Famala	367.88	670.81	15.36	97.51	500.76	993.88	28.67	97.71
i amaie	[65.12]	[126.78]	[3.77]	[14.83]	[107.42]	[190.21]	[10.10]	[15.67]
		Ge	ography o	f commur	nes			
Coastal or delta	435.31	633.83	32.51	76.77**	324.07	555.68	32.2	21.99**
	[133.32]	[188.18]	[11.25]	[20.19]	[168.23]	[248.73]	[20.32]	[15.11]
Others	607.81	1165.9	16.32*	172.64	709.27	1465.88	44.08*	183.33
	[53.21]	[145.86]	[1.95]	[14.42]	[81.53]	[270.30]	[15.29]	[26.47]
			Reg	ions				
North	731.72	1556.14	21.96	232.30*	723.52	1637.05	48.04	181.38*
	[73.77]	[211.74]	[2.80]	[19.66]	[77.87]	[336.40]	[19.02]	[17.53]
Centre	490.25	680.45	7.37	89.73	690.56	884.06	30.96	195.74
	[55.01]	[159.58]	[1.22]	[10.32]	[268.26]	[358.28]	[19.20]	[109.88]
South	370.22	522.34	26.71	70.53*	309.84	539.29	30.78	27.25*
	[108.74]	[148.29]	[8.62]	[16.46]	[152.96]	[226.39]	[18.49]	[15.17]
Total	578.94	24368.46	1064.24	153.36	662.5	11976.21	1336.88	161.84
Iotai	[50.32]	[9642.02]	[123.66]	[13.21]	[75.53]	[3504.33]	[233.67]	[24.10]

		P135-II co	ommunes		n	on-P135-II	communes	
	Pig	Cow	Chicken	Other	Pig	Cow	Chicken	Other
			Ethnic	ity				
non-Kinh and non-	68.79***	86.81	17.17	1.85	79.34***	89.18	17.16	2.22
Ноа	Kinh and Hoa	[2.65]	[1.06]	[0.23]	[2.91]	[3.68]	[1.88]	[0.58]
Kinh và Hoa	93.96	96.8	23.6	1.61	96.48	98.8	25.98	2.22
	[1.85]	[2.71]	[2.53]	[0.63]	[1.59]	[1.28]	[3.96]	[1.01]
			Daily lang	uages				
Absolutely no or little	63.06*	86.45	18.42	2.02	72.06*	90.62	15.63	2.94
Vietnamese	[3.02]	[2.95]	[1.33]	[0.26]	[3.56]	[4.21]	[1.71]	[0.79]
Mixed between Viet-	77.45	87.67	15.51	1.55	83.59	84.98	13.56	0.91
namese and ethnic languages	[2.92]	[5.33]	[1.58]	[0.35]	[4.08]	[7.03]	[2.22]	[0.34]
Absolutely no or little	88.25	91.43	10.78***	1.36	93.37	94.99	29.82***	1.66
ethnic languages	[4.68]	[9.62]	[2.47]	[1.07]	[2.40]	[5.50]	[6.44]	[0.79]
	-	Gen	der of hous	sehold hea	d	-	-	
Male	73.38***	88.95	17.92	1.86	82.45***	92.09	19.13	2.29
Iviale	[2.36]	[2.27]	[0.99]	[0.24]	[2.49]	[2.67]	[2.04]	[0.56]
Famalo	85.6	94.56	27.23	1.12	89.58	92.11	20.62	1.81
Famale	[3.06]	[3.69]	[3.03]	[0.57]	[2.51]	[6.35]	[3.05]	[0.83]
		Geo	ography of	commune	s			
Coastal or dolta	98.99	71.29	32.03	0	98.46	100	26.72	0
	[0.67]	[24.45]	[5.90]	[0.00]	[0.41]	[0.00]	[15.39]	[0.00]
Othors	71.83***	89.56	17.28	1.95	83.03***	91.84	19.26	2.36
Others	[2.43]	[2.19]	[0.95]	[0.26]	[2.56]	[2.87]	[2.06]	[0.55]
			Regio	ns				
North	67.82***	85.78	17.25	2.16	83.54***	89.45	19.49	2.15
Norui	[2.82]	[3.56]	[1.19]	[0.31]	[2.64]	[3.82]	[2.48]	[0.57]
Contro	85.02	93.57	17.9	1.54	80.66	97.57	18.27	3.31
Centre	[3.18]	[1.89]	[1.43]	[0.51]	[7.66]	[1.95]	[2.23]	[1.63]
South	99.03	89.76	29.43	0	98.46	100	26	0
	[0.64]	[9.98]	[5.54]	[0.00]	[0.41]	[0.00]	[14.81]	[0.00]
Total	74.39***	24368.46	89.32	1.79	83.18***	11976.21	92.09	2.22
TOLAI	[2.28]	[9642.02]	[2.17]	[0.24]	[2.42]	[3504.33]	[2.65]	[0.50]

				P135-II CC	mmunes						Ĕ	II-65.L4-u0	commune	es		
	Crops	Live-	Fish-	Forestry	Wages	-uoN	Trans-	Other	Crops	Live-	Fish-	For-	Wages	Non-	Trans-	Other
		stock	eries			farm	fers			stock	eries	estry		farm	fers	
						Enter- prise								Enter- prise		
							Ethni	city								
non-Kinh and non-	6269.95	1513.11	171.74	1185.24	3043.71	828.03	919.95*	319.92	7306.99	1604.56	233.33	983.5	4237.77	1211.41	1288.53*	274.96
Ноа	Kinh and	[95.83]	[22.12]	[81.26]	[322.84]	[181.00]	[78.45]	[34.13]	[744.65]	[128.60]	[51.85]	[100.84]	[844.59]	[362.79]	[201.85]	[47.83]
Kinh và Hoa	5191 14	1171 43**	726.85	470.55	6806.47*	2544 71	1757 47	252.39	5491.59	1767 02**	438.34	486.09	5001 04*	3386 22	2173.66	256.58
	1755 901	[171.38]	1 20.00	162 041	1843-231	[449 06]	14:10:11	63.871	0431.33 [658-43]	[20189]	430.34 [211 24]	400.09 [88.81]	1668 451	52.000.22 [690.36]	00.012	174.07
						-	Daily lang	guages								
Absolutely no or little	6181.39*	1361.21	138.38	1180.73	2838.53	576.36	852.48	351.45	7809.38*	1421.95	261.88	959.06	4042.55	1317.92	835.44	312.5
Vietnamese	[352.76]	[98.77]	[20.18]	[94.52]	[458.66]	[162.54]	[85.56]	[43.20]	[860.85]	[135.18]	[77.21]	[126.87]	[1093.19]	[536.42]	[226.86]	[73.42]
Mixed between Viet-	6785.8	1975.22	247.24	1299.16	3346.27	1425.17	1071.84**	222.27	6171.93	1792.83	169.22	1297.68	4729.43	717.16	1746.98**	215.41
namese and ethnic languages	[794.31]	[207.83]	[50.26]	[115.93]	[324.23]	[500.40]	[135.99]	[40.72]	[779.73]	[189.54]	[43.13]	[124.20]	[815.50]	[223.30]	[256.26]	[46.20]
Absolutely no or little	5734.97	1570.47	170.16	856.59	3730.69	1367.14	704.63**	326.92	6872.72	2017.91	206.64	507.31	4104.27	1601.43	2342.14**	216.91
ethnic languages	[804.80]	[258.06]	[52.24]	[200.60]	[727.29]	[447.97]	[184.49]	[140.29]	[1035.44]	[389.97]	[66.72]	[103.48]	[809.54]	[807.46]	[677.10]	[84.61]
						Gend	ler of hou	sehold h	ead							
	6321.29	1488.78	382.23	1039.56	3965.01	1282.57	1075.97	318.76	7311.16	1711.73	305.55	904.08	4391.81	1721.6	1340.83	281.42
Male	[365.87]	[98.40]	[136.59]	[70.85]	[380.25]	[161.41]	[91.20]	[34.86]	[650.48]	[125.31]	[72.13]	[87.70]	[736.75]	[358.16]	[174.78]	[48.18]
	3605.35	914.19	112.64	504.73	5694.87	1831.03	1806.12	179.56	3890.45	1284.8	196.37	515.95	4768.01	2307.73	2638.25	203.06
Lamaie	[568.62]	[131.40]	[40.91]	[81.03]	[839.62]	[713.90]	[281.30]	[38.04]	[445.57]	[198.52]	[98.79]	[89.16]	[750.38]	[658.29]	[491.08]	[56.82]
						Geo	graphy of	commur	les							
	5676.22	525.09	1096.88	171.05	7403.75	2711.26	1095.26	322.98	6304.04	583.44	1047.4	219.26	9914.49	4403.13	994.7	221.2
COASIAI OF GEILA	[874.12]	[133.44]	[561.95]	[66.74]	[1055.62]	[939.73]	[208.84]	[92.00]	[2626.10]	[209.66]	[497.22]	[153.89]	[3684.70]	[1269.23]	[566.43]	[188.70]
0th 250	6028.18	1601.91	167.68	1157.89**	3425.88	1025.56	1205.60*	295.59	6934.42	1790.92	174.32	942.39**	3700.44	1407.05	1622.84*	277.78
Omers	[365.49]	[91.32]	[23,63]	[68.32]	[389.50]	[118.92]	[120.71]	[31.35]	[600.20]	[111.72]	[27,56]	[82,83]	[337,59]	[328.61]	[201.39]	[41.27]

Table 4.24: Crop income ('000 VND)

							Regic	suc								
	6854.57	1850.01	172.44	1288.88***	2249.62***	857.74	910.21**	209.2	7010.37	1876.65	181.45	949.09***	3687.80***	1376.73	1601.34**	181.02
	[432.64]	[106.51]	[28.08]	[79.10]	[211.31]	[124.69]	[134.40]	[22.57]	[738.54]	[132.78]	[32.37]	[91.71]	[408.51]	[355.79]	[236.87]	[22.64]
Control	5047.66	1452.1	195.08	1016.81	4065.7	1195.31	1660.12	460.61	6718.17	1551.63	156.67	929.19	3583.51	1612.39	1753.58	661
Centre	[652.96]	[129.28]	[51.12]	[130.50]	[498.63]	[232.32]	[207.08]	[82.40]	[817.64]	[209.84]	[52.55]	[199.94]	[501.06]	[842.66]	[389.68]	[158.94]
00:14	5132.91	481.7	816.87	317.04	7973.41	2423.44	1253.55	323.23	6260.65	567.68	966.18	260.89	9629.44	4054.25	983.82	209.75
OUIII	[736.90]	[112.93]	[429.40]	[82.74]	[1034.53]	[721.11]	[237.13]	[73.74]	[2363.02]	[188.40]	[447.52]	[146.72]	[3337.78]	[1211.05]	[509.06]	[169.52]
Totol	5935.32	1407.13	343.92	963.56	4210.85	1360.51	1179.74	298.98	6809.34	1649.09	289.53	847.14	4447	1807.58	1531.17	269.92
וטומו	[333.77]	[94.73]	[118.82]	[71.48]	[413.49]	[223.18]	[103.75]	[30.06]	[596.84]	[114.42]	[70.54]	[80.93]	[636.95]	[356.81]	[187.50]	[41.99]

				P135-II co	mmunes						ou	n-P135-II	commune	es		
	Crops	Live- stock	Fisher- ies	For- estry	Wages	Non- farm Enter- prise	Trans- fers	Other	Crops	Live- stock	Fisher- ies	For- estry	Wages	Non- farm Enter- prise	Trans- fers	Other
							Ethn	icity		]						
non-Kinh and	46.42	10.19	1.14	10.71**	18.8	3.73	6.49	2.53	47.04	10.87	1.51	8.10**	19.35	4.97	6.28	1.88
non-Hoa	Kinh and Hoa	[0.64]	[0.15]	[0.69]	[2.15]	[0.64]	[0.52]	[0.29]	[2.73]	[0.89]	[0.43]	[0.88]	[2.37]	[1.50]	[0.85]	[0.31]
Kinh và Hoa	28.29	7.66*	4.04	3.67	32.18***	11.62	11.03	1.5	33.06	10.88*	2.46	4.06	22.26***	13.9	11.51	1.87
	[2.80]	[1.15]	[1.78]	[0.52]	[2.73]	[2.25]	[1.35]	[0.29]	[3.38]	[1.30]	[1.13]	[0.70]	[2.50]	[2.78]	[1.72]	[0.44]
							Daily lan	Iguages								
Absolutely no or	48.53	9.82	1.06	10.83**	18.12	2.85	6.08	2.71	48.95	9.64	1.77	7.92**	19.07	5.77	4.75	2.12
little Vietnamese	[2.33]	[0.76]	[0.17]	[0.80]	[3.03]	[0.61]	[0.64]	[0.35]	[3.57]	[0.97]	[0.66]	[76.0]	[3.15]	[2.28]	[0.97]	[0.48]
Mixed between	41.52	11.38	1.21	11.32	19.72	5.47	7.66	1.72	43.41	12.06	1.05	10.74	20.37	3.82	7.2	1.34
Vietnamese and ethnic languages	[1.91]	[0.87]	[0.21]	[1.14]	[1.59]	[1.48]	[0.94]	[0.36]	[2.90]	[0.81]	[0.25]	[1.50]	[2.93]	[1.16]	[0.91]	[0.29]
Absolutely no	45	10.97	1.32	7.92**	20.13	6.79	4.42**	3.46	44.61	14.13	1.09	4.01**	19.55	3.84	11.05**	1.73
or little ethnic languages	[3.54]	[1.21]	[0.43]	[1.70]	[2.48]	[2.02]	[66.0]	[2.12]	[5.13]	[2.79]	[0.39]	[0.89]	[3.14]	[1.80]	[3.16]	[0.79]
						Gen	der of hou	usehold h	ead	]						
	42.95	9.8	2.27	8.9	21.41	5.87	6.56	2.24	45.4	11.07	1.8	7.36	19.47	6.64	6.41	1.84
Male	[1.70]	[0.63]	[0.71]	[0.60]	[1.66]	[0.82]	[0.51]	[0.23]	[2.42]	[0.83]	[0.46]	[0.73]	[1.85]	[1.23]	[0.76]	[0.28]
0000	27.51	6.97**	0.69	6.14	32.46*	8.15	16.07	2.02	31.01	9.75**	1.57	4.96	23.95*	11.69	15.03	2.05
Lamae	[2.70]	[0.97]	[0.23]	[0.92]	[3.70]	[2.21]	[2.02]	[0.48]	[3.18]	[1.00]	[0.84]	[0.84]	[3.38]	[3.49]	[2.06]	[0.59]
						Geo	graphy o	f commur	les							
	24.83	2.44	6.23	0.78	44.05	11.81	7.62	2.25	21.12	3.2	6.71	2.24	37.73	20.59	6.74	1.67
	[4.07]	[1.00]	[2.97]	[0.29]	[4.04]	[4.17]	[1.05]	[0:50]	[6.16]	[1.23]	[3.07]	[1.36]	[7.08]	[6.12]	[3.28]	[1.09]
	44.76	10.97	1.06	10.45***	17.69	4.82	8.03	2.22	46.62	11.87	1.02	7.70***	17.7	5.3	7.89	1.91
Outlets	[1.66]	[0.55]	[0.14]	[0.58]	[1.55]	[0.54]	[0.70]	[0.23]	[2.20]	[0.72]	[0.16]	[0.73]	[1.43]	[1.22]	[0.88]	[0.26]

Table 4.25: Crop income percentage (%)

							Regi	ons								
Alouth Mo	51.95	12.79	0.99	11.32***	12.00***	4.06	5.29*	1.61	48.21	12.31	0.97	7.63***	17.12***	5.04	7.29*	1.43
	[1.50]	[0.59]	[0.15]	[0.62]	[0.97]	[0.53]	[0.56]	[0.17]	[2.73]	[0.85]	[0.17]	[0.83]	[1.64]	[1.17]	[1.03]	[0.23]
C c c c c c c c c c c c c c c c c c c c	37.68	9.99	1.44	9.95	20.7	5.17	11.55	3.53	40.91	10.83	1.25	7.9	18.68	6.5	10.12	3.8
Celline	[2.29]	[0.78]	[0.32]	[1.17]	[1.60]	[0.77]	[1.44]	[0.62]	[2.35]	[1.37]	[0.39]	[1.52]	[2.79]	[3.85]	[1.84]	[0.87]
Courth Courth	23.22	2.2	4.64	2.15	44.96	11.06	9.59	2.18	22.68	3.11	6.2	2.73	37.68	19.1	6.88	1.61
	[3.28]	[0.75]	[2.26]	[0.63]	[3.46]	[3.26]	[1.41]	[0.39]	[5.71]	[1.11]	[2.76]	[1.39]	[6.40]	[5.72]	[2.97]	[0.98]
LotoT	40.77	9.4	2.05	8.51	22.97	6.19	7.91	2.21	43.25	10.87	1.77	7	20.14	7.39	7.7	1.87
וטומו	[1.85]	[0.64]	[0.63]	[0.63]	[1.90]	[0.98]	[0.59]	[0.20]	[2.36]	[0.77]	[0.44]	[0.70]	[1.87]	[1.47]	[0.85]	[0.26]

## Table 5.1: Infrastructure: Having road to the commune (%)

		P135-II co	ommunes		-	non-P135-II	communes	5
	Having car road to the center of com- mune	Having car road to the village of interview	Distance from the village to the near- est road (KM)	How many months the near- est road to the village is usable	Having car road to the center of com- mune	Having car road to the village of interview	Distance from the village to the near- est road (KM)	How many months the near- est road to the village is usable
	•		Geogra	phy of com	munes			
Coastal or	86.67	40.00*	3.26	12	100	83.33*	2	12
delta	[9.09]	[13.09]	[0.56]	[0.00]	[0.00]	[16.67]	[0.00]	[0.00]
Others	94.42	67.73***	8.2	9.68***	94.53	80.47***	8.58	10.65***
	[1.45]	[2.96]	[0.97]	[0.19]	[2.02]	[3.52]	[2.86]	[0.21]
				Regions				
North	96.93	60.12***	7.69	9.51***	95.83	82.29***	7.69	10.74***
norun	[1.35]	[3.85]	[1.05]	[0.25]	[2.05]	[3.92]	[2.69]	[0.23]
Centre	88.46	79.49	10.26	9.77	90	73.33	10.49	10.27
Centre	[3.64]	[4.60]	[2.39]	[0.32]	[5.57]	[8.21]	[7.18]	[0.50]
South	92	64	3.26	12	100	87.5	2	12
	[5.54]	[9.80]	[0.56]	[0.00]	[0.00]	[12.50]	[0.00]	[0.00]
Total	93.98	66.17***	7.71	9.82***	94.78	80.60***	8.33	10.71***
TOLAT	[1.46]	[2.91]	[0.89]	[0.18]	[1.93]	[3.43]	[2.76]	[0.20]
## Table 5.2: Infrastructure: having transport of passengers (%)

	P135-II com	munes	non-P135-II c	ommunes
	Having passenger transportation routine through the communes	Nearest dis- tance	Having passen- ger transportation routine through the communes	Nearest dis- tance
	Geograph	y of communes	-	
Coastal or delta	53.33	1.6	33.33	0.75
	[13.33]	[0.78]	[21.08]	[0.25]
Others	16.73**	14.81	28.13**	13.13
	[2.36]	[0.99]	[3.99]	[1.49]
	R	egions		
North	14.11***	15.81	29.17***	13.44
NOTUT	[2.74]	[1.32]	[4.66]	[1.86]
Contro	19.23	13.48	26.67	11.74
Centre	[4.49]	[1.42]	[8.21]	[2.38]
South	48	4.31	25	9.38
South	[10.20]	[1.65]	[16.37]	[6.71]
Total	18.80**	14.62	28.36**	12.87
IOLAI	[2.40]	[0.98]	[3.91]	[1.47]

Mean corrected by sampling weights; Standard errors of mean in brackets; \*\*\* difference in mean between two groups is significant at 1%, \*\* difference in mean between two groups is significant at 5%, \* difference in mean between two groups is significant at 10%.

## Table 5.3: Infrastructure: Having electricity (%)

	P135-II co	ommunes	non-P135-II	communes
	Having electric- ity	Having national electricity grid	Having electric- ity	Having national electricity grid
	Geograp	hy of communes		
Coastal or delta	100	100	100	100
	[0.00]	[0.00]	[0.00]	[0.00]
Others	83.67**	80.48**	91.41**	89.06**
	[2.34]	[2.51]	[2.49]	[2.77]
		Regions		
North	79.14***	76.07***	90.63***	89.58***
NOTUT	[3.19]	[3.35]	[2.99]	[3.13]
Contro	91.03	87.18	93.33	86.67
Centre	[3.26]	[3.81]	[4.63]	[6.31]
South	100	100	100	100
South	[0.00]	[0.00]	[0.00]	[0.00]
Total	84.59**	81.58**	91.79**	89.55**
iotai	[2.22]	[2.38]	[2.38]	[2.65]

		PI	35-Il commun	es			-uou	P135-II commu	nes	
	Having cul-	Having	Having	Having	Having	Having cul-	Having	Having	Having	Having
	tural post office	cultural house	commune radio sta-	small ir- rigation	inter- commune	tural post office	cultural house	commune radio sta-	small ir- rigation	inter- commune
			tion	system	market			tion	system	market
			Gé	eography of c	sommunes					
Coastal or delta	93.33	6.67	86.67	60	66.67	100	16.67	100	50	66.67
	[6.67]	[6.67]	[60.6]	[13.09]	[12.60]	[00.0]	[16.67]	[0.00]	[22.36]	[21.08]
Others	84.86***	21.91*	35.46	61.35	27.49	93.75***	30.47*	43.75	66.41	35.16
	[2.27]	[2.62]	[3.03]	[3.08]	[2.82]	[2.15]	[4.08]	[4.40]	[4.19]	[4.24]
				Regior	IS					
North	87.12***	20.25**	28.83**	60.12*	31.29	95.83***	34.38**	41.67**	70.83*	40.63
	[2.63]	[3.16]	[3.56]	[3.85]	[3.64]	[2.05]	[4.87]	[5.06]	[4.66]	[5.04]
Centre	82.05	23.08	44.87	67.95	20.51	86.67	13.33	46.67	56.67	20
	[4.37]	[4.80]	[5.67]	[5.32]	[4.60]	[6.31]	[6.31]	[9.26]	[9.20]	[7.43]
South	84.00**	20	80.00**	48	48	100.00**	37.5	100.00**	37.5	50
	[7.48]	[8.16]	[8.16]	[10.20]	[10.20]	[00.0]	[18.30]	[0.00]	[18.30]	[18.90]
Total	85.34***	21.05*	38.35	61.28	29.7	94.03***	29.85*	46.27	65.67	36.57
	[2.17]	[2.50]	[2.99]	[2.99]	[2.81]	[2.05]	[3.97]	[4.32]	[4.12]	[4.18]

Mean corrected by sampling weights; Standard errors of mean in brackets; \*\*\* difference in mean between two groups is significant at 1%, \*\* difference in mean between two groups is significant at 5%, \* difference in mean between two groups is significant at 10%.

# Table 5.4: Infrastructure: Other indicators (%)

Table 5.5: Infrastructure: Drinking water in dry season (%)

Piped, bou		PI33-II COMMUNES				non-P135-II commu	nes	
5	ught, filtered nd rain water	Drilled well with pump, dug/constructed well, soil wells with protec- tion walls soil wells without protection walls	River, lake, pond and other sources of water	Clean water	Piped, bought, filtered spring, and rain water	Drilled well with pump, dug/constructed well, soil wells with protec- tion walls soil wells without protection walls	River, lake, pond and other sourc- es of water	Clean water
		Geo	graphy of com	imunes				
Coastal or delta 13.	3.33**	86.67**	0	100	66.67**	33.33**	0	100
6	[60.6	[60.6]	[00:0]	[00.0]	[21.08]	[21.08]	[00:0]	[00.0]
Others 1	1.59	33.47***	62.55***	30.68***	3.13	53.91***	42.19***	55.47***
0]	.79]	[2.98]	[3.06]	[2.92]	[1.54]	[4.42]	[4.38]	[4.41]
			Regions					
2	2.45	23.31***	70.55***	22.70***	3.13	48.96***	47.92***	51.04***
	1.22]	[3.32]	[3.58]	[3.29]	[1.79]	[5.13]	[5.13]	[5.13]
Control O	0	48.72**	51.28***	41.03***	3.33	70.00**	23.33***	70.00***
	[00.C	[5.70]	[5.70]	[5.61]	[3.33]	[8.51]	[7.85]	[8.51]
8.	.00**	84.00**	8	92	50.00**	37.50**	12.5	87.5
	5.54]	[7.48]	[5.54]	[5.54]	[18.90]	[18.30]	[12.50]	[12.50]
Totol 2.	2.26*	36.47***	59.02***	34.59***	5.97*	52.99***	40.30***	57.46***
[0	0.91]	[2.96]	[3.02]	[2.92]	[2.05]	[4.33]	[4.25]	[4.29]

Piped, bought, fittered spring, fittered spring, fittered spring, fittered spring, and rain water and rain water solu walls soli wells with protection walls soli wells with protection malls soli wells with protection malls soli wells with out protection wallsRiver, dug/constructed well, and other sources of waterRiver, dug/constructed well, and other sources of walls soli wells without protection wallsRiver, dug of and other sources of waterRiver, dug of and other sources of waterRiver, dug other and other sources of waterRiver, dug other and other and other sources of waterRiver, dug other and other and other waterRiver, dug other and other and other sources of waterRiver, dug other and other and other sources of and other sources of and other and and and other and			P135-Il communes				non-P135-Il commun	es		
Geography of communes           Coostal or delta         13.33***         Geography of communes           Coostal or delta         13.33***         Geography of communes           Coastal or delta         13.33***         0         100         10         10         10         10           Coastal or delta         13.33***         0         1000         [16.67]         [0.00] <th <<="" colspa="6" th=""><th></th><th>Piped, bought, filtered spring, and rain water</th><th>Drilled well with pump, dug/constructed well, soil wells with protection walls soil wells without protection walls</th><th>River, lake, pond and other sources of water</th><th>Clean water</th><th>Piped, bought, fil- tered spring, and rain water</th><th>Drilled well with pump, dug/constructed well, soil wells with protection walls soil wells without protection walls</th><th>River, lake, pond and other sources of water</th><th>Clean water</th></th>	<th></th> <th>Piped, bought, filtered spring, and rain water</th> <th>Drilled well with pump, dug/constructed well, soil wells with protection walls soil wells without protection walls</th> <th>River, lake, pond and other sources of water</th> <th>Clean water</th> <th>Piped, bought, fil- tered spring, and rain water</th> <th>Drilled well with pump, dug/constructed well, soil wells with protection walls soil wells without protection walls</th> <th>River, lake, pond and other sources of water</th> <th>Clean water</th>		Piped, bought, filtered spring, and rain water	Drilled well with pump, dug/constructed well, soil wells with protection walls soil wells without protection walls	River, lake, pond and other sources of water	Clean water	Piped, bought, fil- tered spring, and rain water	Drilled well with pump, dug/constructed well, soil wells with protection walls soil wells without protection walls	River, lake, pond and other sources of water	Clean water
				Geography of co	mmunes					
	Coastal or delta	13.33***	86.67***	0	100	83.33***	16.67***	0	100	
Others $4.38$ $3.37^{***}$ $62.55^{***}$ $3.67^{***}$ $6.26$ $54.69^{***}$ $42.19^{***}$ $85.5$ $1$ $1.29$ $1.29$ $12.98$ $13.06$ $12.97$ $14.42$ $14.32$ $14.3$ $1$ $1.129$ $12.98$ $13.06$ $12.96$ $12.98$ $14.42$ $14.3$ $14.3$ $1$ $1.129$ $12.98$ $13.06$ $12.96$ $14.42$ $14.3$ $14.3$ $1$ $3.68$ $12.05$ $12.31$ $12.56$ $17.65$ $17.92^{***}$		[60.6]	[60.6]	[00.0]	[00.0]	[16.67]	[16.67]	[00:0]	[00.0]	
	Others	4.38	33.47***	62.55***	32.67***	6.25	54.69***	42.19***	58.59***	
Regint           North         3.68         23.31***         70.55***         23.31***         6.25         47.92***         47.92***         53.1           North         3.68         23.31***         70.55***         23.31***         6.25         47.92***         47.92***         53.1           Interval         11.48         13.32         13.58         13.32         12.58         51.3         15.7           Centre         6.41         48.72***         51.28***         46.15**         6.67         76.67***         23.33***         76.6           Centre         12.79         15.70]         15.70]         15.68]         14.63]         17.85]         17.85]         17.5           South         8.00***         84.00***         8         92         62.50***         25.00***         12.5         87           Total         15.54]         15.54]         17.85]         17.85]         17.85]         17.55]         87           Total         15.54]         15.54]         18.30]         14.63]         116.37]         12.55]         87           Total         4.89*         36.47**         36.47**         3.70*         52.99**         40.30**         60.4		[1.29]	[2.98]	[3.06]	[2.97]	[2.15]	[4.42]	[4.38]	[4.37]	
North $3.68$ $23.31^{***}$ $70.55^{***}$ $23.31^{***}$ $6.25$ $47.92^{***}$ $51.2^{***}$ $53.1^{**}$ $1.48$ $1.48$ $1.32$ $1.32$ $1.3.58$ $1.3.23$ $1.2.61$ $1.5.13$ $15.13$ $15.13$ $1.48$ $6.41$ $48.72^{***}$ $51.28^{***}$ $46.15^{***}$ $6.67$ $76.67^{***}$ $23.33^{***}$ $76.6$ $1.2.79$ $12.79$ $15.70$ $15.70$ $15.70$ $15.70$ $17.85$ $17.85$ $17.85$ $12.79$ $8.00^{***}$ $8.00^{***}$ $84.00^{***}$ $8$ $92$ $62.50^{***}$ $17.85$ $17.85$ $100^{***}$ $8.00^{***}$ $8.00^{***}$ $8.00^{***}$ $12.54$ $15.64$ $14.63$ $17.85$ $17.56$ $100^{***}$ $17.48$ $17.48$ $15.54$ $15.64$ $18.30$ $116.37$ $112.50$ $112.5$ $100^{**}$ $14.8^{**}$ $59.02^{***}$ $56.20^{***}$ $9.70^{**}$ $10.37^{**}$ $10.30^{**}$ $10.30^{**}$ $11.32$ $112$ $112.10^{**}$ $112.10^{**}$ $112.10^{**}$ $112.10^{**}$ $112.10^{**}$ $112.10^{**}$ $11.32$ $112.206$ $12.01^{**}$ $12.01^{**}$ $12.01^{**}$ $12.01^{**}$ $12.01^{**}$ $12.01^{**}$ $11.32$ $112.206$ $12.01^{**}$ $12.01^{**}$ $12.01^{**}$ $12.01^{**}$ $12.01^{**}$ $12.01^{**}$ $11.32$ $112.206$ $12.01^{**}$ $12.01^{**}$ $12.01^{**}$ $12.01^{**}$ $12.01^{**}$ $12.01^{**}$ $1$				Regions	(0)					
	North	3.68	23.31***	70.55***	23.31***	6.25	47.92***	47.92***	53.13***	
Centre         6.41         48.72***         51.28***         46.15***         6.67         76.67***         23.33***         76.6           7.1         [2.79]         [5.70]         [5.70]         [5.68]         [4.63]         [7.85]		[1.48]	[3.32]	[3.58]	[3.32]	[2.48]	[5.13]	[5.13]	[5.12]	
[2.79]         [5.70]         [5.70]         [5.68]         [4.63]         [7.85]         [8.0]           South         8.00***         8         92         62.50***         25.00***         12.55         87           [1.01]         [5.54]         [5.54]         [5.54]         [5.54]         [18.30]         [16.37]         [12.50]         [12.51]         [12.51]	Centre	6.41	48.72***	51.28***	46.15***	6.67	76.67***	23.33***	76.67***	
South         8.00***         84.00***         84.00***         84.00***         12.5         87           [5.54]         [5.54]         [5.54]         [18.30]         [16.37]         [12.50]         [12.50]           Total         4.89*         36.47**         59.02***         36.47**         9.70*         52.99**         40.30**         60.4           Total         11.32]         [2.96]         [3.02]         [2.96]         [2.57]         [4.33]         [4.25]         [4.25]         [4.53]		[2.79]	[5.70]	[5.70]	[5.68]	[4.63]	[7.85]	[7.85]	[7.85]	
[5:54]         [7.48]         [5:54]         [5:54]         [18.30]         [16.37]         [12.50]         [12.           Total         4.89*         36.47***         59.02***         36.47***         9.70*         52.99***         40.30***         60.4           [11.32]         [2.96]         [3.02]         [2.96]         [2.57]         [4.33]         [4.25]         [4.25]	South	8.00***	84.00***	8	92	62.50***	25.00***	12.5	87.5	
Total         4.89*         36.47***         59.02***         36.47***         9.70*         52.99***         40.30***         60.4           [1.32]         [2.96]         [3.02]         [3.02]         [2.96]         [2.57]         [4.33]         [4.25]         [4.25]		[5.54]	[7.48]	[5.54]	[5.54]	[18.30]	[16.37]	[12.50]	[12.50]	
[1.32] [2.96] [3.02] [2.96] [2.96] [2.57] [4.33] [4.25] [4.25]	Total	4.89*	36.47***	59.02***	36.47***	9.70*	52.99***	40.30***	60.45***	
		[1.32]	[2.96]	[3.02]	[2.96]	[2.57]	[4.33]	[4.25]	[4.24]	

Table 5.6: Infrastructure: Drinking water in wet season (%)

Table 5.7: Infrastructure: Schools	%
Table 5.7: Infrastructure: Scho	sloc
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			P135-II cc	ommunes				non-P135-Il cor	nmunes	
	Having pri- mary school	Having lower sec- ondary school	Having higher secondary school	Having primary-low- er secondary school	Having second- ary school	Having primary school	Having Iower secondary school	Having higher secondary school	Having prima- ry-lower sec- ondary school	Having second- ary school
					Geography of co	mmunes				
Coastal or delta	100	93.33	0	0	6.67	100	83.33	0	0	16.67
	[00.0]	[6.67]	[00:0]	[00.0]	[6.67]	[00.0]	[16.67]	[00.0]	[00.0]	[16.67]
Others	76.89	65.34**	2.39**	27.49	1.59	82.81	75.00**	7.81**	20.31	1.56
	[2.67]	[3.01]	[76.0]	[2.82]	[0.79]	[3.35]	[3.84]	[2.38]	[3.57]	[1.10]
					Regions					
	75.46*	66.87**	3.07**	28.22**	1.23	84.38*	80.21**	10.42**	15.63**	1.04
	[3.38]	[3.70]	[1.35]	[3.54]	[0.86]	[3.73]	[4.09]	[3.13]	[3.73]	[1.04]
Control C	76.92	60.26	1.28	29.49	2.56	76.67	56.67	0	36.67	3.33
Centre	[4.80]	[5.58]	[1.28]	[5.20]	[1.80]	[7.85]	[9.20]	[00.0]	[8.95]	[3.33]
4+:-0	100	88	0	0	4	100	87.5	0	0	12.5
SOUL	[00.0]	[6.63]	[00.0]	[00.0]	[4.00]	[00.0]	[12.50]	[00.0]	[00.0]	[12.50]
lo‡oT	78.2	66.92*	2.26**	25.94	1.88	83.58	75.37*	7.46**	19.4	2.24
IOIAI	[2.54]	[2.89]	[0.91]	[2.69]	[0.83]	[3.21]	[3.74]	[2.28]	[3.43]	[1.28]
							1			

Poor physi facilities, l		-II communes				non-P135-II	communes		
provided w not enouç necessar tools	ical The living stan- be dard of teach- vith ers are too low gh limited school v budget	- Not enough space/ table & chair	Low qual- ity of the teacher	Others and don't know	Poor physical facilities, be provided with not enough necessary tools	The living stan- dard of teach- ers are too low, limited school budget	Not enough space/ table & chair	Low qual- ity of the teacher	Others and don't know
-			Geograp	hy of commu	nes				
Coastal or delta 73.33	6.67	0	6.67	33.33	83.33	0	16.67	16.67	16.67
[11.82]	[6.67]	[0.00]	[6.67]	[12.60]	[16.67]	[00.0]	[16.67]	[16.67]	[16.67]
Others 86.06	43.82	19.92	13.15**	27.89	81.25	39.06	16.41	24.22**	27.34
[2.19]	[3.14]	[2.53]	[2.14]	[2.84]	[3.46]	[4.33]	[3.29]	[3.80]	[3.96]
				Regions					
North 85.89	52.76	23.31	12.27**	29.45	80.21	44.79	18.75	22.92**	29.17
[2.74]	[3.92]	[3.32]	[2.58]	[3.58]	[4.09]	[5.10]	[4.00]	[4.31]	[4.66]
Centre 88.46	28.21	15.38	16.67	17.95	83.33	23.33	10	30	16.67
[3.64]	[5.13]	[4.11]	[4.25]	[4.37]	[6.92]	[7.85]	[5.57]	[8.51]	[6.92]
South 72	12.00*	0	4	52	87.5	0.00*	12.5	12.5	37.5
[9.17]	[6.63]	[00.00]	[4.00]	[10.20]	[12.50]	[0.00]	[12.50]	[12.50]	[18.30]
Total 85.34	41.73	18.8	12.78***	28.2	81.34	37.31	16.42	23.88***	26.87
[2.17]	[3.03]	[2.40]	[2.05]	[2.76]	[3.38]	[4.19]	[3.21]	[3.70]	[3.84]

Table 5.8: Infrastructure: Main obstacles to primary education in the commune (%)

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		P135-II cc	ommunes				non-P135-II coi	mmunes		
	Poor physical facilities, be provided with not enough necessary tools	The living stan- dard of teach- ers are too low, limited school budget	Not enough space/ table & chair	Low qual- ity of the teacher	Others and don't know	Poor physical facilities, be provided with not enough necessary tools	The living standard of teachers are too low, limited school budget	Not enough space/ table & chair	Low qual- ity of the teacher	Others and don't know
				Geogra	Iphy of comn	nnes				
Coastal or delta	53.33	13.33	0	0	26.67	66.67	16.67	0	0	33.33
	[13.33]	[60.6]	[00:0]	[00.0]	[11.82]	[21.08]	[16.67]	[00.0]	[00:0]	[21.08]
Others	82.47	41.43	19.12**	19.12**	32.27	82.81	37.5	10.16**	18.75**	28.13
	[2.40]	[3.12]	[2.49]	[2.49]	[2.96]	[3.35]	[4.30]	[2.68]	[3.46]	[3.99]
					Regions					
	85.89	50.31	22.70***	22.70***	34.97	82.29	42.71	9.38***	15.63**	33.33
	[2.74]	[3.93]	[3.29]	[3.29]	[3.75]	[3.92]	[5.08]	[2.99]	[3.73]	[4.84]
Contro C	78.21	26.92	12.82	12.82	25.64**	83.33	23.33	13.33	30	10.00**
Centre	[4.70]	[5.05]	[3.81]	[3.81]	[4.98]	[6.92]	[7.85]	[6.31]	[8.51]	[5.57]
4+ 	56	12	4	4	32	75	12.5	0	0	37.5
South	[10.13]	[6.63]	[4.00]	[4.00]	[9.52]	[16.37]	[12.50]	[00.0]	[00:0]	[18.30]
Totol	80.83	39.85	18.05**	18.05**	31.95	82.09	36.57	9.70**	17.91**	28.36
IDIAI	[2.42]	[3.01]	[2.36]	[2.36]	[2.86]	[3.32]	[4.18]	[2.57]	[3.32]	[3.91]

fa pro		P135-II	communes				non-P135	-II commun	es	
ć	or physical cilities, be ovided with ot enough lecessary tools	The living stan- dard of teach- ers are too low, limited school budget	Not enough space/ table & chair	Low qual- ity of the teacher	Others and don't know	Poor physical facilities, be provided with not enough necessary tools	The living standard of teachers are too low, limited school budget	Not enough space/ table & chair	Low qual- ity of the teacher	Others and don't know
				Geograp	hy of commun	es				
Coastal or delta	0	0	0	0	0	16.67	0	16.67	0	0
	[0.00]	[00.0]	[00:0]	[00.0]	[00.0]	[16.67]	[00.0]	[16.67]	[00.0]	[00:0]
Others	21.51***	7.97*	1.59	3.98**	56.57***	37.50***	14.84*	2.34	10.16**	41.41***
	[2.60]	[1.71]	[0.79]	[1.24]	[3.13]	[4.30]	[3.15]	[1.34]	[2.68]	[4.37]
					Regions					
	21.47***	8.59*	2.45	2.45*	65.03***	38.54***	16.67*	2.08	8.33*	43.75***
INORI	[3.23]	[2.20]	[1.22]	[1.22]	[3.75]	[4.99]	[3.82]	[1.47]	[2.84]	[5.09]
, , , , , , , , , , , , , , , , , , ,	24.36	7.69	0	7.69	46.15	36.67	10	3.33	16.67	36.67
Cellice	[4.89]	[3.04]	[00:0]	[3.04]	[5.68]	[8.95]	[5.57]	[3.33]	[6.92]	[8.95]
4 	0	0	0	0	0	12.5	0	12.5	0	0
SOUL	[0.00]	[00.0]	[00.0]	[00.0]	[0.00]	[12.50]	[00.0]	[12.50]	[00.0]	[00.0]
Totol	20.30***	7.52*	1.5	3.76**	53.38***	36.57***	14.18*	2.99	9.70**	39.55***
IDIAI	[2.47]	[1.62]	[0.75]	[1.17]	[3.06]	[4.18]	[3.02]	[1.48]	[2.57]	[4.24]

Table 5.10: Infrastructure: Main obstacles to higher secondary education in the commune (%)

## Table 5.11: Infrastructure: Using health care services in the commune (%)

	P135-II co	mmunes	non-P135-II co	ommunes
	Having people who do not want to use commune health care center	No health care center	Having people who do not want to use commune health care center	No health care center
	Geograp	hy of communes		
Coastal or delta	20	0	16.67	16.67
	[10.69]	[0.00]	[16.67]	[16.67]
Others	35.46***	2.39	50.78***	6.25
	[3.03]	[0.97]	[4.44]	[2.15]
		Regions		
North	33.13**	3.07	47.92**	7.29
NOTUT	[3.70]	[1.35]	[5.13]	[2.67]
Contro	35.90**	1.28	60.00**	3.33
Centre	[5.47]	[1.28]	[9.10]	[3.33]
Couth	40	0	25	12.5
South	[10.00]	[0.00]	[16.37]	[12.50]
Total	34.59***	2.26*	49.25***	6.72*
IOLAI	[2.92]	[0.91]	[4.34]	[2.17]

Mean corrected by sampling weights; Standard errors of mean in brackets; \*\*\* difference in mean between two groups is significant at 1%, \*\* difference in mean between two groups is significant at 5%, \* difference in mean between two groups is significant at 10%.

## Table 5.12: Infrastructure: Distance to the nearest health clinics in KM

	P1	135-II commun	es	non	P135-II comm	unes
	Distance to health centers	Distance to district hospital	Distance to province hospital	Distance to health centers	Distance to district hospital	Distance to province hospital
		Geogra	aphy of comm	unes		
Coastal or	10.68	9.73	32.2	11.05	10.17	32.33
delta	[2.34]	[1.67]	[5.33]	[3.86]	[2.21]	[5.12]
Others	21.27*	27.53***	95.26	16.11*	21.57***	85.26
	[1.44]	[1.27]	[3.61]	[2.23]	[1.55]	[5.10]
			Regions			
North	19.79***	29.11***	92.53**	10.87***	22.59***	80.01**
NOTUT	[1.68]	[1.71]	[4.12]	[1.00]	[1.81]	[4.64]
Contro	25.92	24.24*	106.47	29.22	18.14*	104
Centre	[3.05]	[1.71]	[7.92]	[6.93]	[3.20]	[15.69]
South	15.5	16.06	44.92	13.53	13.75	41.38
South	[3.12]	[2.72]	[5.96]	[3.97]	[2.97]	[13.41]
Total	20.44*	26.50***	91.4	15.82*	21.04***	82.72
TOLAI	[1.36]	[1.22]	[3.54]	[2.12]	[1.50]	[4.96]

## Table 6.1: Level of education of commune staff (chairman & vice chairman)

		P135-II co	ommunes		n	on-P135-II	commun	es
	No degree	Voca- tional training	Bach- elor	Univer- sity	No degree	Voca- tional training	Bach- elor	Univer- sity
	-	Geog	graphy of	commune	es	-	-	
Coastal or delta	11.43	17.14	60.00	11.43	8.33	16.67	66.67	8.33
	[8.67]	[7.06]	[10.91]	[6.50]	[8.33]	[10.54]	[10.54]	[8.33]
Others	26.16*	27.79	35.97	9.81	18.97*	28.74	41.95	8.62
	[2.58]	[2.68]	[2.87]	[1.56]	[3.20]	[3.84]	[4.17]	[2.23]
			Regio	ns				
North	33.05**	27.54	29.66*	9.32	21.80**	26.32	40.60*	9.02
norun	[3.45]	[3.22]	[3.37]	[1.85]	[3.92]	[4.21]	[4.81]	[2.66]
Contro	14.29	27.73	47.90	10.08	7.89	39.47	44.74	7.89
Centre	[3.30]	[5.08]	[5.27]	[2.95]	[4.28]	[9.11]	[9.13]	[4.28]
South	10.64	21.28	55.32	12.77	13.33	13.33	66.67	6.67
3000	[6.72]	[6.48]	[8.64]	[5.35]	[8.58]	[8.58]	[8.89]	[6.62]
Tatal	24.88*	26.87	38.06	9.95	18.28*	27.96	43.55	8.60
TOTAL	[2.49]	[2.53]	[2.82]	[1.52]	[3.05]	[3.66]	[4.00]	[2.15]

Mean corrected by sampling weights; Standard errors of mean in brackets; \*\*\* difference in mean between two groups is significant at 1%, \*\* difference in mean between two groups is significant at 5%, \* difference in mean between two groups is significant at 10%.

## Table 6.2: Participation in training of commune staff

		P135-II communes		
	% of respondents who attend	Nb of commune staff who attend	Nb of CSB & PMU who attend	
	Geography of con	nmunes		
Coastal or delta	37.14	12.20	6.60	
	[13.91]	[3.22]	[1.79]	
Others	56.51	8.01	5.96	
	[3.02]	[0.85]	[0.75]	
	Regions			
North	51.46	8.34	6.54	
North	[3.77]	[1.26]	[1.15]	
Contro	69.33	7.11	4.76	
Centre	[4.66]	[0.74]	[0.37]	
South	30.95	12.80	7.04	
South	[12.22]	[2.64]	[1.48]	
Total	55.52	8.25	5.99	
Iotal	[2.96]	[0.82]	[0.71]	

Mean corrected by sampling weights; Standard errors of mean in brackets; Corresponding information on non-P135-II communes are not available

## Table 6.3: Assessment of training by commune staff

		P135-II co	ommunes	
	Duration of the training (nb of days)	Appropriate- ness of the duration (% who consider sufficient)	Training practi- cal & applicable (% practical & very practical)	Quality of the trainers (% good & very good)
	Geogra	ohy of communes		
Coastal or delta	10.00	35.42	50.00	59.38
	[3.91]	[17.38]	[18.90]	[17.64]
Others	6.87	25.51	64.13	61.70
	[0.44]	[3.41]	[3.86]	[3.93]
		Regions		
North	5.93	23.91	56.37	49.82
NOTUT	[0.39]	[4.28]	[5.02]	[5.08]
Contro	8.23	28.04	76.34	80.36
Centre	[0.88]	[5.67]	[5.68]	[5.36]
South	10.00	35.42	50.00	59.38
300011	[3.91]	[17.38]	[18.90]	[17.64]
Total	7.03	26.04	63.39	61.58
ΤΟΙΔΙ	[0.46]	[3.35]	[3.78]	[3.82]

Mean corrected by sampling weights; Standard errors of mean in brackets; Corresponding information on non-P135-II communes are not available

#### Table 6.4: Management and planning (assessment of commune staff)

		P135-II co	mmunes	
	% of com- mune with PMU	% participatory plan- ning	% with training plan	% with commu- nication plan
		Geography of communes	6	
Coastal or delta	33.33	60.00	60.00	100.00
	[12.60]	[24.49]	[24.49]	[0.00]
Others	67.73	91.76	77.06	80.00
	[2.96]	[2.11]	[3.23]	[3.08]
		Regions		
North	69.33	93.81	84.07	85.84
INOITII	[3.62]	[2.28]	[3.46]	[3.29]
Contro	70.51	87.27	63.64	69.09
Centre	[5.20]	[4.54]	[6.55]	[6.29]
South	28.00	71.43	57.14	85.71
South	[9.17]	[18.44]	[20.20]	[14.29]
Total	65.79	90.86	76.57	80.57
IOLAI	[2.91]	[2.18]	[3.21]	[3.00]

Mean corrected by sampling weights; Standard errors of mean in brackets; Corresponding information on non-P135-II communes are not available

	P135-II communes						
	% with new reporting format	How often a year (general report)? (nb/ year)	How often a year (finan- cial report)? (nb/year)	How often a year for participatory monitor- ing? (nb/year)			
	Geograp	ohy of commun	es				
Coastal or delta	60.00	4.00	1.00	12.00			
	[24.49]	[0.00]	[0.00]	[0.00]			
Others	57.06	6.67	4.74	6.26			
	[3.81]	[0.43]	[0.39]	[0.45]			
		Regions					
North	63.72	6.96	5.91	6.95			
NOTUT	[4.54]	[0.50]	[0.50]	[0.53]			
Contro	43.64	5.59	2.19	4.38			
Centre	[6.75]	[0.83]	[0.33]	[0.77]			
Couth	57.14	8.00	1.00	12.00			
South	[20.20]	[4.00]	[0.00]	[0.00]			
Tetal	57.14	6.65	4.70	6.31			
TOTAL	[3.75]	[0.43]	[0.39]	[0.45]			

#### Table 6.5: Report for Management and planning (assessment of commune staff)

Mean corrected by sampling weights; Standard errors of mean in brackets; Corresponding information on non-P135-II communes are not available

		P135-II	communes	;	non-P135-II communes				
	Pov- erty reduc- tion	Socio- economic develop- ment	P135	education & culture	Poverty reduc- tion	Socio- economic develop- ment	P135	education & culture	
			Geogra	phy of commu	nes	-	-	-	
Coastal or delta	13.33	26.67**	80.00	0.00	33.33	0.00**	50.00	0.00	
	[9.09]	[11.82]	[10.69]	[0.00]	[21.08]	[0.00]	[22.36]	[0.00]	
Others	51.90	24.05	66.67***	35.02	52.68	25.89	22.32***	41.96	
	[3.25]	[2.78]	[3.07]	[3.11]	[4.74]	[4.16]	[3.95]	[4.68]	
			-	Regions		-	-	-	
North	54.25	24.18	66.01***	35.95	55.81	26.74	23.26***	41.86	
NOTIT	[4.04]	[3.47]	[3.84]	[3.89]	[5.39]	[4.80]	[4.58]	[5.35]	
Contro	53.33	26.67	70.67***	37.33	45.83	25.00	20.83***	45.83	
Centre	[5.80]	[5.14]	[5.29]	[5.62]	[10.39]	[9.03]	[8.47]	[10.39]	
Couth	8.33	16.67**	66.67	0.00	25.00	0.00**	37.50	0.00	
South	[5.76]	[7.77]	[9.83]	[0.00]	[16.37]	[0.00]	[18.30]	[0.00]	
Tatal	49.60	24.21	67.46***	32.94	51.69	24.58	23.73***	39.83	
iotai	[3.16]	[2.70]	[2.96]	[2.97]	[4.62]	[3.98]	[3.93]	[4.53]	

#### Table 6.6: Main programme in the commune (assessment of commune staff)

	ion Others		50.00	[22.36]	20.54	[3.83]		17.44	[4.12]	25.00	[9.03]	62.50	[18.30]	22.03	[3.83]
l communes	Job creat		50.00	[22.36]	9.82	[2.82]		9.30	[3.15]	12.50	[06:9]	37.50	[18.30]	11.86	[2.99]
non-P135-I	Environment, clean water		33.33	[21.08]	35.71*	[4.55]		38.37	[5.27]	29.17	[9.48]	25.00	[16.37]	35.59*	[4.43]
	Health & com- munity health		00.0	[00:0]	20.54	[3.83]		18.60	[4.22]	29.17	[9.48]	00.00	[00:0]	19.49	[3.66]
	Others	y of communes	46.67	[13.33]	20.68	[2.64]	tegions	16.34	[3.00]	21.33	[4.76]	62.50	[10.09]	22.22	[2.62]
munes	Job creation	Geograph	46.67	[13.33]	11.39	[2.07]	ш	11.11	[2.55]	13.33	[3.95]	29.17	[9.48]	13.49	[2.16]
P135-II com	Environment, clean water		13.33	[60.6]	26.58*	[2.88]		29.41	[3.70]	24.00	[4.96]	8.33	[5.76]	25.79*	[2.76]
	Health & commu- nity health		00.0	[00:0]	14.77	[2.31]		14.38	[2.85]	17.33	[4.40]	0.00	[00:0]	13.89	[2.18]
			Coastal or delta		Others			4 	INOLLI	Contro C	Cellice	4	IIInoc	Totol	IOIAI

Table 6.7: Main programmes in the commune (continued) (assessment of commune staff)

		P135-II co	ommunes	Non P135-II communes	Total
		P135 project	Non P135 project	Non P135 project	
1	Road to the province or	24	60	12	96
	district	0.98%	1.62%	1.33%	1.36%
2	Commune roads	360	228	54	642
		14.67%	6.16%	6.0%	9.1%
3	Bridge	144	168	36	348
		5.87%	4.54%	4.0%	4.93%
4	Village roads	420	336	112	868
		17.11%	9.08%	12.44%	12.3%
5	Enlargement of irrigation	228	264	88	580
	system	9.29%	7.13%	9.78%	8.22%
6	Strenthing canals	96	150	38	284
		3.91%	4.05%	4.22%	4.02%
7	Electricity	216	66	26	308
		8.8%	1.78%	2.89%	4.37%
8	Clean water	138	510	96	744
		5.62%	13.78%	10.67%	10.54%
9	Treatment of solid waste &	6	12	0	18
	waste water	0.24%	0.32%	0.0%	0.26%
10	Health station	114	156	48	318
		4.65%	4.21%	5.33%	4.51%
11	School	372	546	130	1048
		15.16%	14.75%	14.44%	14.85%
12	Nursery/Kindergarten	102	168	68	338
		4.16%	4.54%	7.56%	4.79%
13	Transform/enlarge land for	24	66	10	100
	housing	0.98%	1.78%	1.11%	1.42%
14	Land reclamation for cultiva-	36	156	20	212
	tion	1.47%	4.21%	2.22%	3.0%
15	Afforestation	30	312	68	410
		1.22%	8.43%	7.56%	5.81%
16	Others	144	504	94	742
		5.87%	13.61%	10.44%	10.52%
	Total	2454	3702	900	7056
	Total number of projects	100.0%	100.0%	100.0%	100.0%

# Table 6.8: Type of infrastructure projects implemented in 2007 (according tocommune staff)

#### Table 6.9: Organisation of meeting to select project (according to commune staff)

	P135-II co	non-P135-II com- munes						
	P135 project non P135 project							
	Geography of co	mmunes						
Coastal or delta	82.93	58.49*	96.67***					
	[11.00]	[10.99]	[3.96]					
Others	86.96**	81.91	79.05					
	[2.40]	[2.41]	[2.86]					
	Regions							
North	86.27*	80.43	80.31					
North	[3.24]	[3.28]	[2.89]					
Contro	87.10	84.44	74.23					
Centre	[3.76]	[3.25]	[7.84]					
South	86.00	65.22*	96.97***					
South	[9.24]	[9.44]	[3.46]					
Total	86.55**	79.90*	80.22					
IUlai	[2.43]	[2.52]	[2.74]					

Mean corrected by sampling weights; Standard errors of mean in brackets; \*\*\* difference in mean between the current category and the rest is significant at 1%, \*\* difference in mean is significant at 5%, \* difference in mean is significant at 10%.

	P135-II co	ommunes	non-P135-II com- munes					
	P135 project non P135 project							
	Geography of com	munes						
Coastal or delta	88.79	86.39	80.00					
	[1.95]	[3.89]	[5.67]					
Others	87.60***	91.43***	87.60					
	[1.06]	[0.76]	[1.36]					
	Regions							
North	88.74*	92.43***	86.67**					
North	[1.20]	[0.87]	[1.59]					
Contro	87.89**	91.18**	91.53					
Centre	[1.57]	[1.20]	[2.05]					
South	83.00	82.18	79.38					
South	[3.90]	[3.74]	[5.07]					
Tatal	87.71***	91.11***	86.99*					
Iotal	[0.98]	[0.75]	[1.38]					

## Table 6.10: Percentage of Household participating in meeting (assessment of commune staff)

## Table 6.11: Percentage of Poor Household participating in meeting (assessment of commune staff)

	P135-II co	non-P135-II com- munes	
	P135 project	non P135 project	non P135 project
	Geography o	of communes	
Coastal or delta	46.97***	27.71***	29.58
	[5.60]	[6.25]	[13.11]
Others	62.24	61.04	56.81
	[2.12]	[3.23]	
	Reg	ions	
North	66.25**	61.29	54.37**
NOTUT	[2.82]	[2.55]	[3.75]
Contro	58.07	59.01	65.64
Centre	[2.96]	[2.70]	[6.25]
South	46.91	43.31	32.59
South	[5.32]	[8.87]	[11.87]
Total	60.76	58.94	55.32
IUlai	[2.02]	[2.01]	[3.27]

Mean corrected by sampling weights; Standard errors of mean in brackets; \*\*\* difference in mean between the current category and the rest is significant at 1%, \*\* difference in mean is significant at 5%, \* difference in mean is significant at 10%.

	P135-II co	non-P135-II com- munes	
	P135 project	non P135 project	non P135 project
	Geography of co	mmunes	
Coastal or delta	100.00	93.61	100.00
	[0.00]	[6.41]	[0.00]
Others	97.93	98.55	98.33
	[0.46]	[0.37]	[0.58]
	Regions	i de la companya de l	
North	98.13*	99.23**	98.24
	[0.54]	[0.28]	[0.74]
Contro	98.32	98.49	98.81
Centre	[0.74]	[0.66]	[0.58]
South	97.56	90.93	99.53*
South	[1.36]	[4.93]	[0.53]
Total	98.13	98.24	98.47
	[0.42]	[0.53]	[0.54]

## Table 6.12: Percentage of HH participating agreeing selection (assessment of commune staff)

## Table 6.13: Organisation of public bidding (assessment of commune staff)

	P135-II con	non-P135-II com-	
	P135 project	non P135 project	non P135 project
	Geography of com	nunes	•
Coastal or delta	0.00	0.00	20.00
	[0.00]	[0.00]	[12.56]
Others	11.68***	30.50***	26.19
	[2.66]	[3.01]	[3.71]
	Regions		
North	14.71***	28.26**	24.06
	[4.27]	[3.61]	[4.12]
Contro	8.39***	32.78***	31.96
Centre	[2.61]	[5.46]	[8.41]
South	0.00**	13.04	24.24
South	[0.00]	[7.21]	[12.41]
Total	10.51***	27.88***	25.78
	[2.43]	[2.88]	[3.56]

Mean corrected by sampling weights; Standard errors of mean in brackets; \*\*\* difference in mean between the current category and the rest is significant at 1%, \*\* difference in mean is significant at 5%, \* difference in mean is significant at 10%.

Table	<i>6.14:</i>	Detailed	financial	information	made	public	(assessment	of	com-
mune	staff)								

	P135-II co	non-P135-II com- munes	
	P135 project	non P135 project	non P135 project
	Geography of com	munes	
Coastal or delta	29.27	28.30	60.00
	[9.36]	[11.06]	[18.53]
Others	55.43**	63.30	67.14
	[3.92]	[3.04]	[3.76]
	Regions		
Nerth	54.90*	61.96	70.00*
NOItti	[4.96]	[3.83]	[4.36]
Contro	53.55	63.89	57.73
Centre	[6.49]	[5.32]	[7.61]
South	42.00	42.03	60.61
South	[10.76]	[10.51]	[16.64]
Total	52.81**	60.29	66.67**
	[3.79]	[3.11]	[3.67]

## Table 6.15: Infrastructure monitored by people (assessment of commune staff)

	P135-II communes		non-P135-II com-
	P135 project	non P135 project	non P135 project
	Geography of comm	iunes	•
Coastal or delta	100.00***	69.81**	80.00
	[0.00]	[10.83]	[10.48]
Others	79.89*	72.87*	75.71
	[3.01]	[2.90]	[3.43]
	Regions		
North	76.47	69.84	76.25
	[4.11]	[3.83]	[3.80]
Contro	83.23	78.89	73.20
Centre	[4.63]	[4.24]	[7.99]
South	100.00***	71.01**	81.82
South	[0.00]	[9.63]	[9.29]
Total	81.91***	72.61**	76.00
	[2.76]	[2.82]	[3.27]

Mean corrected by sampling weights; Standard errors of mean in brackets; \*\*\* difference in mean between the current category and the rest is significant at 1%, \*\* difference in mean is significant at 5%, \* difference in mean is significant at 10%.

	P135-II communes		non-P135-II com- munes
	P135 project	non P135 project	non P135 project
	Geography of con	nmunes	•
Coastal or delta	82.93***	47.17**	40.00
	[7.62]	[10.91]	[20.32]
Others	26.63***	35.11	45.71***
	[3.37]	[3.43]	[4.48]
	Regions	-	-
Nerth	22.06***	36.96	51.56***
North	[3.67]	[4.27]	[4.95]
Contro	30.32	31.67	27.84
Centre	[5.86]	[6.00]	[8.58]
Courth	80.00***	43.48***	36.36
South	[7.63]	[9.58]	[18.00]
Total	32.27	36.14	45.33**
	[3.63]	[3.28]	[4.38]

#### Table 6.16: Monitoring board qualified (assessment of commune staff)

#### Table 6.17: O&M plan for the infrastructure (assessment of commune staff)

	P135-II communes		non-P135-II com-
	P135 project	non P135 project	non P135 project
	Geography of con	nmunes	
Coastal or delta	43.90*	13.21**	26.67
	[13.50]	[6.14]	[17.65]
Others	45.92	48.05	49.29
	[3.95]	[3.61]	[4.44]
	Regions		
Niewile	54.90	57.07	53.13
North	[5.16]	[4.21]	[5.02]
Contro	36.77	33.89	37.11
Centre	[5.72]	[6.15]	[8.53]
South	36.00*	10.14**	27.27
30001	[11.68]	[4.82]	[15.74]
Total	45.72	45.06	47.78
Iotai	[3.81]	[3.50]	[4.34]

Mean corrected by sampling weights; Standard errors of mean in brackets; \*\*\* difference in mean between the current category and the rest is significant at 1%, \*\* difference in mean is significant at 5%, \* difference in mean is significant at 10%.

	P135-II communes		non-P135-II com- munes
	P135 project	non P135 project	non P135 project
	Geography of co	mmunes	
Coastal or delta	2.44*	18.87	26.67
	[2.32]	[9.80]	[17.65]
Others	23.91***	34.22*	36.43
	[3.52]	[3.19]	[4.07]
	Regions	i.	
North	23.53	31.79	34.69
	[4.94]	[4.00]	[4.63]
Contro	21.29***	38.89**	41.24
Centre	[4.70]	[5.50]	[8.74]
South	16.00	23.19	30.30
South	[8.72]	[8.62]	[16.36]
Total	21.76***	32.90**	35.78
	[3.25]	[3.08]	[3.96]

#### Table 6.18: Open an account in the treasury (assessment of commune staff)

	P135-II communes		non-P135-II com- munes
	P135 project	non P135 project	non P135 project
	Geography of com	munes	
Coastal or delta	85.37	79.25	83.33
	[7.03]	[10.38]	[9.43]
Others	80.43**	88.30**	85.00
	[2.65]	[2.02]	[2.72]
	Regions		
North	79.90	86.68	85.31
	[3.62]	[2.75]	[2.94]
Contro	80.00**	90.56***	83.51
Centre	[4.07]	[2.81]	[6.79]
South	88.00	84.06	84.85
South	[5.94]	[8.25]	[8.37]
Total	80.93**	87.52**	84.89
	[2.49]	[2.07]	[2.60]

# Table 6.19: Satisfaction with the quality of the infrastructure (assessment of commune staff)

Mean corrected by sampling weights; Standard errors of mean in brackets; \*\*\* difference in mean between the current category and the rest is significant at 1%, \*\* difference in mean is significant at 5%, \* difference in mean is significant at 10%.

## Table 6.20: Percentage of Household benefiting from the infrastructure (assessment of commune staff)

	P135-II communes		non-P135-II com- munes
	P135 project	non P135 project	non P135 project
	Geography of co	mmunes	
Coastal or delta	30.18	8.55*	23.54
	[11.51]	[3.26]	[6.74]
Others	47.83*	41.60**	48.70
	[2.52]	[2.37]	[2.94]
	Regions		
North	38.66	37.73	41.94
	[2.97]	[2.83]	[3.07]
Contro	56.45*	44.46***	69.71***
Centre	[3.64]	[3.98]	[5.29]
Couth	51.66	38.36	37.14
South	[14.66]	[11.78]	[11.79]
Total	46.74*	39.79***	48.11
	[2.51]	[2.34]	[2.89]

## Table 6.21: Percentage of Poor Household benefiting from the infrastructure(assessment of commune staff)

	P135-II co	non-P135-II com- munes	
	P135 project	non P135 project	non P135 project
	Geography of com	munes	
Coastal or delta	26.80*	7.38**	19.47
	[8.36]	[3.05]	[4.72]
Others	48.39*	41.91**	49.04
	[2.48]	[2.33]	[3.08]
	Regions		
North	40.97	37.61	41.62
	[3.09]	[2.77]	[3.17]
Contro	56.83	46.02***	72.13***
Centre	[3.84]	[3.90]	[5.45]
South	37.92	34.62	35.66
South	[10.13]	[11.15]	[13.13]
Total	46.88**	39.85***	48.34
	[2.43]	[2.30]	[3.03]

Mean corrected by sampling weights; Standard errors of mean in brackets; \*\*\* difference in mean between the current category and the rest is significant at 1%, \*\* difference in mean is significant at 5%, \* difference in mean is significant at 10%.

	P135-II co	non-P135-II com- munes	
	P135 project	non P135 project	non P135 project
	Geography of com	nmunes	
Coastal or delta	349414.11	552468.75	729285.71
	[103364.76]	[273412.57]	[514852.71]
Others	730082.39*	529908.81**	751396.74
	[71914.73]	[64006.25]	[120521.88]
	Regions		
North	608882.76	535951.87	607692.11
	[48496.32]	[85430.11]	[102400.35]
Contro	936444.99	538275.58**	1230936.96
Centre	[163641.43]	[98072.21]	[381664.45]
South	376590.80	480494.96	692400.21
South	[86988.75]	[198916.96]	[428535.26]
Total	689830.45	531391.19**	750106.93
	[67211.48]	[62485.76]	[116680.16]

#### Table 6.22: Total value of the project (assessment of commune staff)

,			
	P135-II co	non-P135-II com- munes	
	P135 project	non P135 project	non P135 project
	Geography of com	munes	
Coastal or delta	-	-	-
Others	13.92***	30.71*	27.94
	[2.94]	[4.84]	[3.76]
	Regions		
North	15.54***	39.60**	32.09
Norun	[3.39]	[6.13]	[4.40]
Contro	4.49**	9.62	11.91
Centre	[1.32]	[2.43]	[4.49]
South	7.26	3.37	9.52
South	[0.00]	[2.35]	[0.00]

# Table 6.23: Contribution of the commune in percentage (assessment of commune staff)

Mean corrected by sampling weights; Standard errors of mean in brackets; \*\*\* difference in mean between the current category and the rest is significant at 1%, \*\* difference in mean is significant at 5%, \* difference in mean is significant at 10%.

30.71\*

[4.84]

27.94

[3.76]

13.76\*\*\*

[2.87]

Total

## Table 6.24: Contribution of the Households in percentage (assessment of commune staff)

	P135-II co	ommunes	non-P135-II com- munes			
	P135 project	non P135 project	non P135 project			
Geography of communes						
Coastal or delta	-	-	-			
Others	13.98***	29.11	26.77			
	[3.13]	[4.76]	[3.61]			
	Regions					
North	15.82***	37.48**	30.66			
Norui	[3.66]	[6.10]	[4.20]			
Contro	4.49*	9.39	11.57			
Centre	[1.32]	[2.38]	[4.37]			
South	0.98	3.37	9.52			
South	[0.00]	[2.35]	[0.00]			
Total	13.64***	29.11*	26.77			
Iotal	[3.06]	[4.76]	[3.61]			

# Table 6.25: Percentage of projects for which commune is the investment owner(assessment of commune staff)

	P135-II co	ommunes	non-P135-II com- munes			
	P135 project	non P135 project	non P135 project			
Geography of communes						
Coastal or delta	9.76	30.19	26.67			
	[9.30]	[11.35]	[9.16]			
Others	23.91***	45.57***	44.76*			
	[3.39]	[3.39] [3.21]				
	Regions	-				
North	22.55***	42.12***	43.75			
NOTUT	[4.86]	[3.86]	[4.24]			
Contro	22.58***	51.11***	47.42			
Centre	[4.34]	[5.79]	[8.71]			
South	22.00	37.68	30.30			
South	[10.98]	[10.44]	[9.33]			
Total	22.49***	44.25***	43.56*			
ΤΟΙΆΙ	[3.22]	[3.15]	[3.63]			

Mean corrected by sampling weights; Standard errors of mean in brackets; \*\*\* difference in mean between the current category and the rest is significant at 1%, \*\* difference in mean is significant at 5%, \* difference in mean is significant at 10%. For each project, commune staff answered if the commune is the investment owner

# Table 6.26: Characteristics of project by type of financing institution (assessment of commune staff)

	Nb of projects	Projects for which the com- mune is the investment owner	Amount value of project (in thou- sands of Dong)		Amount value of project (in thou- sands of Dong)		Contril Housef	bution of 10ld in %
Main financing institution	Total	%	mean	se(mean)	mean	se(mean)	mean	se(mean)
Central level	2592	38.35	634,139	32,910	18.51	1.08	18.51	1.09
Provincial level	674	28.78	996,940	85,543	32.35	2.35	32.24	2.33
District	1700	25.29	435,528	15,534	31.79	2.22	33.59	2.46
Commune	122	90.16	200,233	27,918	71.25	5.81	37.04	4.70
Village	174	22.99	48,928	8,341	99.75	3.29	99.39	3.29
Other donors	1274	45.68	474,399	18,381	10.70	0.74	10.84	0.75
Others	342	60.23	246,534	19,780	40.05	3.34	38.29	3.15
Do not know	178	14.61	165,441	24,669	10.00	0.00	10.00	0.00
Total	7056	36.59	537,369	15,734	27.42	0.90	26.30	0.88

# Table 6.27: Think that Commune investment owner is better (assessment ofcommune staff)

	P135-II communes		non-P135-II	communes
	Commune in- vestment owner	Non investment owner	Commune in- vestment owner	Non investment owner
	Geograph	y of communes		
Coastal or delta	100.00***	43.24***	100.00***	68.18
	[0.00]	[11.15]	[0.00]	[15.06]
Others	96.81***	70.70***	96.28***	73.28
	[1.05]	[3.14]	[1.61]	[5.09]
	R	legions		
North	96.02***	71.97***	95.71***	76.67
NOLLI	[1.56]	[3.71]	[2.03]	[5.33]
Contro	97.64***	70.19***	97.83***	62.75
Centre	[1.39]	[5.70]	[2.23]	[12.19]
South	100.00***	41.46***	100.00***	65.22
South	[0.00]	[10.44]	[0.00]	[15.20]
Total	96.99***	67.62***	96.43***	72.83
Total	[0.99]	[3.15]	[1.54]	[4.81]

#### Table 6.28: No problem during the implementation (assessment of commune staff)

	P135-II communes		non-P135-II	communes
	Commune in- vestment owner	Non investment owner	Commune in- vestment owner	Non investment owner
	Geograp	hy of communes	-	-
Coastal or delta	75.00	66.22	50.00	68.18
	[16.53]	[8.14]	[30.78]	[20.28]
Others	67.54***	53.83***	57.45	54.31
	[3.74]	[3.32]	[5.60]	[5.27]
		Regions		
North	63.18***	46.90***	54.29	52.22
NOLUI	[4.32]	[4.02]	[6.23]	[6.02]
Contro	74.80	64.42	69.57	62.75
Centre	[7.03]	[5.20]	[10.71]	[10.48]
South	70.27	69.51	40.00	65.22
South	[12.95]	[7.46]	[24.78]	[19.85]
Total	67.95***	55.22**	57.14	55.51
TOTAL	[3.64]	[3.12]	[5.53]	[5.16]

Mean corrected by sampling weights; Standard errors of mean in brackets; \*\*\* difference in mean between the current category and the rest is significant at 1%, \*\* difference in mean is significant at 5%, \* difference in mean is significant at 10%.

# Table 6.29: Problem slow allocation of budget during the implementation (assessment of commune staff)

	P135-II communes		non-P135-II	communes
	Commune in- vestment owner	Non investment owner	Commune in- vestment owner	Non investment owner
	Geograph	y of communes		
Coastal or delta	10.00*	0.00*	0.00	0.00
	[4.75]	[0.00]	[0.00]	[0.00]
Others	12.17	8.86	14.89	4.74**
	[3.30]	[1.65]	[4.92]	[1.84]
	R	egions		
North	14.43	9.16	14.29	5.00**
NOLLI	[3.72]	[2.18]	[5.76]	[2.25]
Contro	10.24	8.65	17.39	3.92
Centre	[6.82]	[2.56]	[9.94]	[2.72]
Couth	5.41	0.00	0.00	0.00
South	[3.20]	[0.00]	[0.00]	[0.00]
Total	12.05	7.87	14.29	4.33**
iotai	[3.13]	[1.48]	[4.74]	[1.69]

# Table 6.30: Problem of rehabitation during the implementation (assessment ofcommune staff)

	P135-II communes		non-P135-I	I communes
	Commune investment owner	Non investment owner	Commune investment owner	Non investment owner
	Geograp	hy of communes		•
Coastal or delta	0.00***	27.03***	0.00***	4.55**
	[0.00]	[7.33]	[0.00]	[4.90]
Others	7.25***	13.29**	7.98	15.09
	[1.30]	[1.88]	[2.77]	[3.48]
	I	Regions		
North	7.46**	14.29*	7.86	16.11
NOTUT	[1.70]	[2.53]	[3.32]	[4.25]
Contro	7.87	12.02	8.70	11.76
Centre	[2.25]	[2.76]	[5.21]	[4.88]
South	0.00***	24.39***	0.00***	4.35*
South	[0.00]	[6.72]	[0.00]	[4.66]
Total	6.85***	14.83***	7.65	14.17
TOLAI	[1.24]	[1.89]	[2.67]	[3.25]

Mean corrected by sampling weights; Standard errors of mean in brackets; \*\*\* difference in mean between the current category and the rest is significant at 1%, \*\* difference in mean is significant at 5%, \* difference in mean is significant at 10%.

# Table 6.31: Percentage of Household benefiting from the infrastructure (as-sessment of commune staff)

	P135-II communes		non-P135-II	communes
	Commune in- vestment owner	Non investment owner	Commune in- vestment owner	Non investment owner
	Geogra	phy of communes		
Coastal or delta	6.47*	20.91	13.51	26.04
	[2.69]	[6.84]	[0.00]	[5.29]
Others	40.54*	46.11	42.52	53.61**
	[3.28]	[2.09]	[3.56]	[4.20]
		Regions		
North	31.67**	41.47*	37.76	45.09
North	[3.59]	[2.49]	[3.67]	[4.32]
Contro	45.73	52.62	55.21	82.79***
Centre	[5.08]	[3.47]	[8.38]	[4.99]
South	64.52*	32.21*	43.61	34.26
South	[17.44]	[9.04]	[21.39]	[9.71]
Total	39.38	44.34	42.20	52.69**
TOLAI	[3.22]	[2.08]	[3.53]	[4.09]

## Table 6.32: Percentage of Poor Household benefiting from the infrastructure(assessment of commune staff)

	P135-II communes		non-P135-I	l communes
	Commune investment owner	Non investment owner	Commune investment owner	Non investment owner
	Geograp	hy of communes		•
Coastal or delta	8.05	17.71	8.19	22.29
	[2.84]	[5.60]	[0.00]	[1.93]
Others	41.19*	46.36	44.50	52.64*
	[3.08]	[2.15]	[3.63]	[4.38]
		Regions		
N I - untile	32.94**	41.97*	39.19	43.46
norur	[3.48]	[2.53]	[3.70]	[4.45]
Contro	47.60	53.11	58.79	83.90***
Centre	[4.81]	[3.70]	[8.65]	[5.24]
South	57.22*	26.03*	46.30	30.93
South	[16.08]	[7.36]	[27.08]	[8.94]
Total	40.04	44.07	44.11	51.62*
TOLAI	[3.03]	[2.15]	[3.61]	[4.26]

Mean corrected by sampling weights; Standard errors of mean in brackets; \*\*\* difference in mean between the current category and the rest is significant at 1%, \*\* difference in mean is significant at 5%, \* difference in mean is significant at 10%.

## Table 6.33: Infrastructure projects implemented in the last 12 months according to households (%)

		P135-Il communes		Non P135-II communes	Total
		P135 project	Non P135	Non P135 proj-	
			project	eci	
1	Commune roads	15.96	10.84	10.13	12.14
2	Village roads	17.64	23.69	27.04	22.44
3	Irrigation system	14.12	11.68	10.77	12.23
4	Market	4.41	2.80	2.49	3.20
5	School	22.65	19.18	18.18	20.00
6	Village cultural house	4.73	7.47	10.16	7.03
7	Commune health station	5.29	6.84	7.07	6.45
8	Clean water supply	8.05	7.79	7.73	7.85
9	Electricity wire	4.20	3.58	2.60	3.64
10	Popular Committee House	2.96	6.13	3.84	5.02
	Total	100.00	100.00	100.00	100.00

# Table 6.34: Organisation of meeting to select project in the village (assessment of households)

	P135-II communes		non-P135-II com-		
			munes		
	P135 project	non P135	non P135 project		
		project			
	Ethnicity		1		
Kinh and Hoa	63.46***	39.69***	55.35		
	[5.85]	[4.00]	[9.33]		
non-Kinh and non-Hoa	57.01***	34.84***	57.56***		
	[3.37]	[3.54]	[4.07]		
D	aily languages				
Absolutely no or little Vietnamese	52.47***	24.80***	52.10***		
	[4.16]	[3.22]	[5.05]		
Mixed between Vietnamese and ethnic	63.02**	49.52**	62.11		
languages	[4.91]	[4.58]	[5.31]		
Absolutely no or little ethnic languages	66.56	67.04	66.73		
	[5.57]	[9.50]	[6.66]		
Gender of household head					
Male	57.68***	35.62***	56.28***		
	[3.30]	[2.89]	[4.23]		
Female	65.68***	40.53***	60.82*		
	[5.26]	[5.53]	[5.55]		
Geogi	aphy of communes		•		
Coastal or delta	52.83**	17.34**	0.00**		
	[12.82]	[5.72]	[0.00]		
Others	59.10***	37.16***	57.36***		
	[3.11]	[3.08]	[4.13]		
	Regions				
North	65.38***	40.10***	61.59***		
North	[3.67]	[3.64]	[4.05]		
Contro	47.13	36.81	43.31		
Centre	[6.00]	[5.49]	[10.61]		
Cauth	61.44***	10.05***	7.85		
South	[6.90]	[3.61]	[9.35]		
Living co	onditions of househ	old			
Poor	53.56***	30.49***	55.43***		
	[4.35]	[3.18]	[4.34]		
Non poor	61.92***	41.14***	57.99*		
	[3.34]	[3.68]	[5.06]		
Total	58.78***	36.25***	56.96***		
	[3.02]	[2.97]	[4.11]		

## Table 6.35: Participation of household in the meeting (according to households)

	P135-II communes		non-P135-II communes
	P135 project	non P135 proj- ect	non P135 project
	Ethnicity		
Kinh and Hoa	48.49*	33.40**	43.40
	[7.36]	[3.76]	[8.02]
non-Kinh and non-Hoa	49.54***	30.74***	52.38***
	[3.61]	[3.34]	[3.91]
Da	ily languages		
Absolutely no or little Vietnamese	43.29***	21.15***	47.79***
	[4.18]	[2.90]	[4.72]
Mixed between Vietnamese and ethnic lan-	56.73*	44.55**	58.91
guages	[4.66]	[4.59]	[5.37]
Absolutely no or little ethnic languages	65.06	62.17	53.47
	[5.66]	[9.23]	[6.14]
Gender	of household head		
Male	48.00***	31.13***	49.59***
	[3.79]	[2.73]	[4.00]
Female	57.12***	34.16***	52.08
	[5.79]	[5.31]	[5.70]
Geogra	phy of communes		
Coastal or delta	33.17*	6.19*	0.00***
	[7.87]	[4.66]	[0.00]
Others	50.11***	32.73***	50.31***
	[3.73]	[2.91]	[3.91]
	Regions		
North	57.19***	35.19***	53.60**
	[3.99]	[3.38]	[3.96]
Centre	43.50	32.67	39.36
Centre	[6.15]	[5.77]	[10.28]
South	25.85*	5.02*	7.85
	[10.54]	[2.25]	[9.35]
Living conditions of household			
Poor	48.87***	26.87***	47.81***
	[4.37]	[2.96]	[4.20]
Non poor	49.48**	35.46***	51.39*
	[4.67]	[3.53]	[4.89]
Total	49.25***	31.52***	49.96***
	[3.58]	[2.81]	[3.90]

# Table 6.36: Household voice their opinion to select infrastructure (assessmentof households)

	P135-II communes		non-P135-II com-
			munes
	P135 project	non P135 proj-	non P135 project
		ect	
	Ethnicity		1
Kinh and Hoa	27.32	21.03	32.57
	[5.26]	[5.07]	[6.37]
non-Kinh and non-Hoa	27.45	23.28	31.56
	[3.42]	[3.09]	[4.05]
Da	ily languages		
Absolutely no or little Vietnamese	29.14	23.21	34.41
	[4.36]	[3.78]	[5.83]
Mixed between Vietnamese and ethnic lan-	28.89	25.88	28.33
guages	[4.67]	[5.35]	[5.60]
Absolutely no or little ethnic languages	17.98	16.06	33.08*
	[6.54]	[5.22]	[7.94]
Gender	of household hea	d	
Male	27.28	22.97*	31.64
	[3.31]	[2.66]	[3.75]
Female	28.12	20.24	32.64
	[6.91]	[4.82]	[5.71]
Geogra	phy of communes	;	
Coastal or delta	-	-	-
	-	-	-
Others	27.99	22.79**	31.80
	[3.11]	[2.68]	[3.57]
	Regions		•
Nievelle	25.68	20.10**	31.45*
North	[3.91]	[3.06]	[3.93]
	33.71	31.38	32.85
Centre	[4.26]	[3.80]	[8.68]
	-	-	-
South	-	-	-
Living conditions of household			
Poor	16.50	15.81	19.72
	[3.10]	[3.95]	[3.35]
Non poor	33.91	26.95**	39.28
	[4.29]	[3.42]	[4.98]
Total	27.42	22.59**	31.80*
	[3.06]	[2.67]	[3.57]

# Table 6.37: Household' opinion considered to select infrastructure (assessment of households)

	P135-II communes		non-P135-II communes
	P135 project	non P135 proj-	non P135
		ect	project
	Ethnicity		
Kinh and Hoa	53.15*	70.48	71.65
	[11.69]	[8.28]	[8.93]
non-Kinh and non-Hoa	56.24**	77.69***	51.94*
	[5.04]	[5.48]	[7.70]
Da	aily languages		
Absolutely no or little Vietnamese	48.41*	70.54**	52.15
	[7.02]	[9.62]	[10.94]
Mixed between Vietnamese and ethnic	63.79	81.65**	64.35
languages	[9.53]	[5.52]	[8.68]
Absolutely no or little ethnic languages	73.70	89.98**	35.29***
	[11.89]	[9.83]	[13.29]
Gender	of household head		
Male	56.19***	76.85***	56.01
	[5.04]	[4.80]	[6.76]
Female	51.42	66.99	60.12
	[13.21]	[11.63]	[10.60]
Geogra	aphy of communes		
Coastal or delta	-	-	-
	-	-	-
Others	54.78***	75.62***	56.67
	[4.73]	[4.56]	[6.44]
Regions			
North	55.47**	76.77***	51.52*
North	[6.01]	[5.76]	[6.61]
Contro	52.00***	73.45*	80.65
Centre	[7.46]	[7.16]	[10.22]
South	-	-	-
South	-	-	-
Living conditions of household			
Poor	50.49**	78.39***	61.31
	[9.87]	[6.65]	[8.20]
Non poor	56.83**	74.57***	55.22
	[5.68]	[6.00]	[7.68]
Total	55.41***	75.62***	56.67
	[4.73]	[4.56]	[6.44]

## Table 6.38: Satisfaction with the selection of projects (assessment of households)

	P135-II communes		non-P135-II communes
	P135 project	non P135 proj- ect	non P135 project
E	Ethnicity		
Kinh and Hoa	90.74	92.05**	72.40***
	[2.35]	[2.56]	[4.11]
non-Kinh and non-Hoa	81.90	82.14	79.82
	[2.49]	[2.75]	[3.88]
Daily	y languages		
Absolutely no or little Vietnamese	78.95	79.96	80.59
	[3.58]	[3.79]	[3.50]
Mixed between Vietnamese and ethnic lan-	85.05	86.39	80.24
guages	[4.01]	[3.28]	[6.64]
Absolutely no or little ethnic languages	89.68	84.32	72.96*
	[4.07]	[6.26]	[5.82]
Gender of	household head		
Male	83.76	84.58	77.10*
	[2.30]	[2.26]	[3.23]
Female	87.89	87.99	81.93
	[3.33]	[3.98]	[4.70]
Geograp	hy of communes		
Coastal or delta	94.97	91.20	100.00
	[3.60]	[6.47]	[0.00]
Others	83.76	84.72	77.67*
	[2.14]	[2.37]	[3.30]
Regions			
Niewile	81.38	84.09	77.24
North	[3.15]	[2.95]	[3.69]
Contro	88.20	83.15	78.93
Centre	[2.14]	[4.36]	[7.49]
Cauth	87.40	95.46	100.00*
South	[6.63]	[3.19]	[0.00]
Living conditions of household			
Poor	86.74	85.83	77.48*
	[2.38]	[2.43]	[4.66]
Non poor	82.87	84.33	78.05
	[2.90]	[2.83]	[3.47]
Total	84.33	85.02	77.82*
	[2.07]	[2.29]	[3.28]

	P135-II communes		non-P135-II communes
	P135 project	non P135 proj- ect	non P135 project
	Ethnicity	1	
Kinh and Hoa	18.51	17.80	27.92
	[6.04]	[4.00]	[5.91]
non-Kinh and non-Hoa	21.20**	26.84	41.17***
	[3.11]	[3.16]	[4.22]
Dail	ly languages		
Absolutely no or little Vietnamese	22.21	23.29	42.25***
	[3.27]	[2.96]	[4.25]
Mixed between Vietnamese and ethnic lan-	21.05**	29.85	44.32**
guages	[4.95]	[5.27]	[7.04]
Absolutely no or little ethnic languages	17.13*	46.29	30.68
	[6.43]	[12.61]	[5.73]
Gender o	f household head	•	•
Male	21.33	23.78	37.66***
	[3.13]	[2.78]	[4.08]
Female	15.01***	27.10	37.26**
	[3.76]	[4.18]	[5.27]
Geograp	bhy of communes	•	•
Coastal or delta	0.00**	5.56	37.16
	[0.00]	[2.58]	[19.09]
Others	21.56*	25.10	37.60***
	[3.03]	[2.87]	[3.94]
Regions			
	23.95	26.83	41.91***
North	[3.89]	[3.55]	[3.90]
	20.38	24.86	22.82
Centre	[5.17]	[5.77]	[9.87]
	2.25	5.68	44.11***
South	[2.03]	[1.99]	[13.10]
Living conditions of household			
Poor	21.51	24.18	38.79***
	[3.18]	[2.88]	[4.49]
Non poor	19.83	24.23	36.81***
	[3.52]	[3.33]	[4.43]
Total	20.46*	24.21	37.60***
	[2.94]	[2.75]	[3.92]

Table 6.39: Projects for which household has contributed to the building of theinfrastructure (assessment of households)

	P135-II communes		non-P135-II
			communes
	P135 project	non P135 project	non P135 project
	Ethnicity		
Kinh and Hoa	43.03*	82.50	87.36
	[22.22]	[50.59]	[28.36]
non-Kinh and non-Hoa	45.99	25.86	34.89
	[13.73]	[6.54]	[9.38]
Da	ily languages		
Absolutely no or little Vietnamese	41.51	37.61	33.29
	[12.70]	[10.86]	[10.09]
Mixed between Vietnamese and ethnic lan-	53.27	11.88**	31.45
guages	[23.73]	[4.33]	[12.95]
Absolutely no or little ethnic languages	51.17*	7.85***	48.15
	[18.86]	[5.55]	[17.48]
Gender	of household head	k	
Male	40.03	34.62	41.22
	[11.35]	[12.90]	[10.41]
Female	91.97	57.91	69.34
	[34.49]	[17.54]	[24.12]
Geogra	phy of communes		
Coastal or delta	-	-	-
	-	-	-
Others	45.26	38.38	43.66
	[11.71]	[13.04]	[10.73]
Regions			
North	53.99	37.33	47.05
North	[16.99]	[17.15]	[12.37]
Contro	29.46	39.62	22.64
Centre	[7.65]	[12.72]	[8.69]
South	-	-	-
	-	-	-
Living conditions of household			
Poor	28.98	22.99	38.18
	[9.27]	[8.00]	[12.68]
Non poor	55.90	50.66	50.45
	[16.59]	[22.13]	[13.32]
Total	45.26	37.97	45.39
	[11.71]	[12.90]	[10.84]

Table 6.40: Contribution of household in cash to build the infrastructure (aver-age in Dong) (assessment of households)

	P135-II communes		non-P135-II com- munes	
	P135 project	non P135 project	non P135 project	
	Ethnicity			
Kinh and Hoa	1.29**	5.11	3.79	
	[0.44]	[2.03]	[1.04]	
non-Kinh and non-Hoa	5.68*	7.43	7.18	
	[1.07]	[0.82]	[1.05]	
D	aily languages			
Absolutely no or little Vietnamese	7.01*	9.19	8.84	
	[1.30]	[1.00]	[1.40]	
Mixed between Vietnamese and ethnic	3.50	4.86	5.59	
languages	[0.97]	[0.93]	[1.11]	
Absolutely no or little ethnic languages	3.38**	6.11	5.46	
	[0.90]	[0.75]	[1.24]	
Gende	r of household he	ead		
Male	4.73***	7.31**	6.77	
	[0.92]	[0.84]	[0.90]	
Female	3.38	4.68	4.95	
	[1.02]	[1.00]	[1.28]	
Geogr	aphy of commun	es		
Coastal or delta	-	-	-	
	-	-	-	
Others	4.59***	7.00*	6.54	
	[0.87]	[0.85]	[0.91]	
Regions				
North	5.52**	8.51**	7.31	
NOTUT	[1.10]	[0.84]	[0.99]	
Contro	2.86	2.78	2.01	
Centre	[1.31]	[1.13]	[0.57]	
South	-	-	-	
South	-	-	-	
Living conditions of household				
Poor	4.25***	6.78	7.05	
	[0.89]	[0.79]	[1.13]	
Non poor	4.82*	7.06	6.12	
	[1.09]	[1.19]	[0.90]	
Total	4.59***	6.93*	6.50	
	[0.87]	[0.84]	[0.91]	

# Table 6.41: Contribution of household in labor days to build the infrastructure(average; nb days) (assessment of households)

	P135-II communes		non-P135-II communes
	P135 project	non P135 project	non P135 proj- ect
	Ethnicity	•	•
Kinh and Hoa	28.76**	16.20**	18.14
	[5.91]	[3.14]	[5.69]
non-Kinh and non-Hoa	17.12***	6.86***	14.81
	[2.50]	[1.39]	[2.79]
Dai	ly languages		
Absolutely no or little Vietnamese	13.86***	4.50***	13.41**
	[2.45]	[1.12]	[2.57]
Mixed between Vietnamese and ethnic lan-	21.65***	10.48**	14.01
guages	[4.32]	[3.24]	[4.81]
Absolutely no or little ethnic languages	22.43	13.99	23.27
	[11.14]	[6.09]	[4.80]
Gender o	of household head		
Male	20.17***	9.24***	16.05
	[2.59]	[1.60]	[2.73]
Female	21.29	11.81	13.76
	[5.36]	[3.54]	[4.13]
Geograp	bhy of communes	-	
Coastal or delta	23.34	8.62	0.00***
	[5.69]	[4.68]	[0.00]
Others	20.16***	9.62***	15.81
	[2.72]	[1.72]	[2.75]
	Regions	-	
North	23.73***	11.09***	17.36
North	[3.85]	[1.84]	[2.96]
Contro	10.47	7.32	10.74
Centre	[2.32]	[4.32]	[6.72]
South	34.02***	5.10***	0.00***
South	[7.09]	[2.87]	[0.00]
Living conditions of household			
Poor	18.08***	5.73***	15.29
	[3.00]	[1.28]	[3.68]
Non poor	21.67**	12.84**	15.98
	[3.24]	[2.56]	[2.85]
Total	20.32***	9.57***	15.71
	[2.60]	[1.65]	[2.73]

## Table 6.42: The village organize public bidding (assessment of households)
	P135-II o	communes	non-P135-II communes					
	P135 project	non P135 project	non P135 project					
Ethnicity								
Kinh and Hoa	8.09	8.45	11.22					
	[2.17]	[2.68]	[3.15]					
non-Kinh and non-Hoa	12.27**	4.85***	10.39					
	[2.52]	[0.89]	[2.11]					
Dail	ly languages							
Absolutely no or little Vietnamese	11.86**	4.18***	10.33					
	[2.69]	[0.88]	[2.43]					
Mixed between Vietnamese and ethnic lan-	16.12**	6.08**	7.92					
guages	[4.20]	[2.11]	[2.53]					
Absolutely no or little ethnic languages	5.06	6.07	17.50**					
	[2.64]	[2.60]	[4.96]					
Gender o	of household head	I						
Male	11.08*	6.00***	10.60					
	[2.10]	[1.16]	[1.79]					
Female	11.37*	5.19**	10.70					
	[3.36]	[1.92]	[3.14]					
Geograp	hy of communes							
Coastal or delta	3.68	0.00	0.00					
	[4.11]	[0.00]	[0.00]					
Others	11.52**	6.18***	10.69					
	[2.06]	[1.10]	[1.81]					
	Regions							
North	14.83**	6.06***	12.39					
North	[2.99]	[1.16]	[2.25]					
Contro	6.80	7.77	5.04					
Centre	[1.92]	[2.79]	[1.76]					
South	5.42	0.44	0.00					
	[3.48]	[0.36]	[0.00]					
Living cond	ditions of househo	old						
Poor	8.12	4.22**	7.29					
	[2.08]	[1.14]	[2.08]					
Non poor	12.92*	7.32**	12.83					
	[2.62]	[1.40]	[2.23]					
Total	11.12**	5.90***	10.62					
	[1.99]	[1.06]	[1.79]					

Table 6.43: Percentage of household who received financial information on theinfrastructure project (assessment of households)

## Table 6.44: The village / commune nominate a supervision team (assessmentof households)

	P135-II o	non-P135-II communes	
	P135 project	non P135 project	non P135 project
E	Ethnicity		
Kinh and Hoa	50.19	42.52	50.91
	[6.17]	[4.36]	[8.92]
non-Kinh and non-Hoa	46.88**	35.26***	53.38***
	[3.68]	[2.89]	[3.90]
Daily	/ languages		
Absolutely no or little Vietnamese	42.95***	26.93***	47.35***
	[3.87]	[2.84]	[5.00]
Mixed between Vietnamese and ethnic lan-	57.58	48.92**	58.93
guages	[4.73]	[3.76]	[5.13]
Absolutely no or little ethnic languages	42.19	56.05	60.37
	[13.08]	[10.46]	[4.18]
Gender of	household head	•	
Male	47.69*	38.01***	51.19**
	[3.66]	[2.71]	[3.90]
Female	48.43	33.08***	61.37***
	[6.60]	[4.90]	[6.39]
Geograpi	hy of communes	•	
Coastal or delta	38.20*	13.52*	0.00**
	[9.28]	[5.52]	[0.00]
Others	48.30*	38.52***	53.08**
	[3.56]	[2.76]	[3.90]
I	Regions		
Niewtle	53.06	41.62***	56.86***
North	[5.20]	[3.17]	[3.59]
Contro	42.76	37.34	40.82
Centre	[4.57]	[5.10]	[10.85]
Couth	36.13***	9.92***	0.00***
South	[6.57]	[2.78]	[0.00]
Living cond	itions of househo	ld	
Poor	46.14**	30.07***	51.45***
	[5.23]	[2.69]	[4.89]
Non poor	48.78	43.57	53.56
	[3.65]	[3.62]	[4.66]
Total	47.79**	37.37***	52.72***
	[3.41]	[2.69]	[3.89]

## Table 6.45: Supervision team trained before taking their role (assessment of households)

	P135-II co	non-P135-II com- munes	
	P135 project	non P135 project	non P135 project
	Ethnicity		
Kinh and Hoa	21.82	12.73**	20.04
	[6.43]	[2.92]	[4.83]
non-Kinh and non-Hoa	26.99*	17.43*	19.74
	[4.79]	[2.98]	[4.12]
	Daily languages		
Absolutely no or little Vietnamese	26.34	17.62	14.30
	[5.67]	[4.12]	[3.68]
Mixed between Vietnamese and ethnic	33.99*	21.20	21.26
languages	[7.18]	[3.95]	[6.69]
Absolutely no or little ethnic languages	6.97	5.01**	34.78***
	[3.66]	[3.43]	[7.24]
Gend	er of household he	ad	
Male	25.88**	15.64**	20.79
	[4.27]	[2.21]	[3.47]
Female	23.12	17.69	15.20
	[5.95]	[7.59]	[5.82]
Geog	graphy of commune	s	
Coastal or delta	-	-	-
	-	-	-
Others	26.58**	15.54***	19.82
	[4.09]	[2.26]	[3.46]
	Regions		
North	28.72***	13.70***	19.00
	[5.28]	[2.69]	[3.85]
Centre	25.14	21.83	23.63
	[6.44]	[3.93]	[7.66]
South	-	-	-
	-	-	-
Living o	conditions of house	hold	
Poor	18.15	12.22*	22.05
	[4.72]	[2.69]	[6.11]
Non poor	29.68**	18.02*	18.39
	[5.16]	[2.89]	[3.58]
Total	25.50**	15.88**	19.82
	[4.02]	[2.28]	[3.46]

	P135-II co	non-P135-II com- munes	
	P135 project	non P135 project	non P135 project
	Ethnicity		
Kinh and Hoa	60.44	51.00*	69.98**
	[6.54]	[5.08]	[6.48]
non-Kinh and non-Hoa	59.08	54.91*	67.63*
	[4.57]	[3.33]	[5.23]
Da	aily languages		
Absolutely no or little Vietnamese	62.64	56.84	71.50
	[6.14]	[4.56]	[6.30]
Mixed between Vietnamese and ethnic	58.35	59.72	62.55
languages	[6.26]	[5.29]	[7.54]
Absolutely no or little ethnic languages	41.05	32.80***	68.96***
	[12.14]	[4.55]	[5.32]
Gender	of household head	k	
Male	58.00	53.71**	73.00***
	[3.95]	[3.03]	[3.16]
Female	68.56*	52.94	45.74
	[5.99]	[10.04]	[11.46]
Geogra	aphy of communes		
Coastal or delta	-	-	-
	-	-	-
Others	58.85	53.61**	68.24**
	[3.62]	[2.98]	[4.52]
	Regions		
North	61.45	51.48***	66.07*
	[4.99]	[2.86]	[5.06]
Centre	53.35*	61.05	78.43**
	[4.59]	[6.97]	[6.15]
South	-	-	-
	-	-	-
Living cor	nditions of househ	old	
Poor	57.20	55.19	64.65
	[4.30]	[3.89]	[5.46]
Non poor	60.77	52.70**	70.54**
	[4.70]	[4.20]	[4.75]
Total	59.47	53.62**	68.24**
	[3.49]	[2.98]	[4.52]

Table 6.46: Satisfaction with the qualification of the supervision board (assessment of households)

# Table 6.47: Satisfied with the quality of the infrastructure project (assessment of households)

	P135-II co	non-P135-II communes				
	P135 project	non P135	non P135 proj-			
		project	ect			
	Ethnicity					
Kinh and Hoa	70.99	72.69	63.35*			
	[4.27]	[3.76]	[4.04]			
non-Kinh and non-Hoa	66.21	63.44	67.27			
	[3.42]	[3.02]	[3.54]			
Dai	ly languages					
Absolutely no or little Vietnamese	64.14	61.35	66.37			
	[4.15]	[4.14]	[4.20]			
Mixed between Vietnamese and ethnic lan-	72.63	65.45	66.00			
guages	[4.27]	[2.97]	[5.28]			
Absolutely no or little ethnic languages	61.20	72.72	68.89			
	[6.81]	[4.10]	[5.42]			
Gender o	of household head					
Male	67.65	65.33	66.60			
	[3.09]	[2.49]	[3.10]			
Female	66.68	71.56	64.04			
	[6.20]	[4.30]	[5.14]			
Geograp	ohy of communes	•	•			
Coastal or delta	71.62**	44.65**	100.00***			
	[7.17]	[7.85]	[0.00]			
Others	67.30	67.16	65.98			
	[3.01]	[2.59]	[2.99]			
	Regions	-				
Niewile	64.09	65.31	66.96			
North	[3.71]	[3.23]	[3.55]			
Contro	68.90	67.71	62.38			
Centre	[5.31]	[3.91]	[5.36]			
Courth	81.18	67.71	100.00***			
South	[5.20]	[10.13]	[0.00]			
Living conditions of household						
Poor	70.58	66.99	66.53			
	[3.80]	[2.95]	[4.17]			
Non poor	65.68	65.40	66.01			
	[3.58]	[3.36]	[3.30]			
Total	67.52	66.13	66.21			
	[2.88]	[2.54]	[2.98]			

# Table 6.48: The infrastructure project is useful for the household (assessmentof households)

	P135-II com-		non-P135-II com-
	munes		munes
	P135 project	non P135 proj-	non P135 project
	Ethericity (	ect	
	Ethnicity	00.74	04.54
Kinh and Hoa	85.37	86.71	91.54
	[4.01]	[2.78]	[2.29]
non-Kinh and non-Hoa	84.01	84.18	87.64
	[3.09]	[2.23]	[2.20]
Da	ily languages		
Absolutely no or little Vietnamese	84.92	83.38	87.72
	[3.26]	[3.14]	[2.35]
Mixed between Vietnamese and ethnic	86.32	83.23	84.43
languages	[4.07]	[2.32]	[2.95]
Absolutely no or little ethnic languages	73.91**	94.16*	95.37*
	[8.43]	[2.40]	[1.80]
Gender	of household head	d	
Male	83.90	84.48	89.71**
	[2.79]	[1.78]	[1.53]
Female	87.44	87.92	82.92
	[3.49]	[3.28]	[5.31]
Geogra	phy of communes	;	-
Coastal or delta	71.62*	50.17*	100.00***
	[7.17]	[8.31]	[0.00]
Others	85.07	86.59	88.61
	[2.70]	[1.74]	[1.84]
	Regions	•	
N I a set la	82.86	86.16	88.54
North	[3.08]	[2.37]	[2.16]
	86.30	86.57	88.76
Centre	[5.38]	[2.08]	[3.49]
	86.26	72.97	100.00***
South	[7.39]	[8.98]	[0.00]
Living cor	ditions of househ	old	
Poor	86.68	83.37	88.61
	[2.72]	[2.14]	[2.22]
Non poor	83.00	86.24	88.74
	[3.22]	[2.22]	[1.89]
Total	84.38	84.92	88.69
	[2.61]	[1.83]	[1.82]

#### Table 7.1: % of individuals ill or injured in last 12 months

	P135-II co	ommunes	non-P135-II communes		
	Stay in bed or need so to take care	Be absent from work/ school	Stay in bed or need so to take care	Be absent from work/school	
	Eth	nicity	•	•	
Kinh and Hoa	45.93	69.55	41.86	66.87	
	[1.38]	[2.13]	[2.05]	[3.29]	
non-Kinh and non-Hoa	35.61	55.01*	39.62	67.87*	
	[2.89]	[4.93]	[3.23]	[5.28]	
	Daily I	anguages			
Absolutely no or little Vietnam-	46.72	71.08	45.01	69.15	
ese	[1.64]	[2.43]	[2.62]	[4.73]	
Mixed between Vietnamese	44.49	66.78	40.49	65.89	
and ethnic languages	[2.94]	[3.22]	[3.99]	[4.71]	
Absolutely no or little ethnic	42.76*	63.72	31.44*	58.64	
languages	[5.10]	[4.82]	[4.41]	[6.90]	
	Gender of h	ousehold head			
Male	43.1	65.67	41.11	67.37	
	[1.70]	[2.55]	[1.83]	[2.94]	
Female	38.71	58.73	41.72	65.92	
	[3.14]	[4.85]	[4.56]	[4.87]	
	Geography	of communes			
Coastal or delta	28.42	33.69	33.99	35.47	
	[3.95]	[4.79]	[3.39]	[3.37]	
Others	46.50*	72.92	42.17*	72.38	
	[1.28]	[1.60]	[1.98]	[2.57]	
	Re	gions			
North	46.40*	74.83	41.44*	70.81	
North	[1.73]	[1.82]	[2.39]	[2.81]	
Centre	48.39	71.65	45.26	79.32	
Centre	[2.12]	[3.47]	[3.29]	[5.76]	
South	31.41	41.14	34.15	36.89	
	[3.31]	[4.73]	[3.09]	[3.32]	
Total	5.78	3.45	5.97	3.52	
	[0.27]	[0.24]	[0.32]	[0.28]	

## Table 7.2: Type of health facility used by household members ill or injured (inlast 12 months) (%)

	P135-II communes		non-P135-II communes			
	Health center (hamlet, com- mune, region)	Hospital (district, province, national, other)	Other	Health center (hamlet, com- mune, region)	Hospital (district, province, na- tional, other)	Other
	-	Ethnicity			-	-
Kinh and Hoa	64.33	14.1	21.57	59.27	17.38	23.35
	[2.53]	[1.05]	[2.37]	[4.73]	[1.88]	[3.60]
non-Kinh and non-Hoa	32.28	21.04*	46.68	28.42	26.28*	45.3
	[4.77]	[1.80]	[5.16]	[3.45]	[2.47]	[4.97]
		Daily languag	es			
Absolutely no or little Vietnamese	65.13	12.82	22.05	57.82	16.12	26.06
	[2.86]	[1.15]	[2.52]	[5.62]	[2.17]	[4.43]
Mixed between Vietnamese and	62.22	16.3	21.49	63.47	19.89	16.64
ethnic languages	[3.86]	[1.91]	[4.26]	[4.99]	[2.53]	[3.29]
Absolutely no or little ethnic	63.32	20.79	15.89	54.07	22.95	22.98
languages	[4.28]	[2.93]	[2.93]	[5.90]	[3.78]	[5.18]
	Gen	der of househo	ld head			
Male	55.2	15.98*	28.83	51.43	19.24*	29.32
	[2.86]	[0.95]	[2.82]	[3.92]	[1.52]	[3.30]
Female	39.72	20.19	40.09	42.01	25.32	32.67
	[5.03]	[1.94]	[5.21]	[4.95]	[3.51]	[5.84]
	Geo	graphy of com	munes			
Coastal or delta	15.87	18.74	65.38	13.93	22.65	63.43
	[2.59]	[2.47]	[4.03]	[4.76]	[5.54]	[3.79]
Others	63.34*	15.97**	20.69	56.89*	19.65**	23.46
	[1.96]	[0.97]	[1.62]	[3.00]	[1.42]	[2.82]
		Regions				
North	68.78*	14.50***	16.72	61.74*	20.98***	17.27
	[2.42]	[1.30]	[2.00]	[2.90]	[1.84]	[2.02]
Centre	53.29	18.51	28.2	44.88	16.49	38.64
	[3.33]	[1.54]	[3.02]	[6.10]	[1.62]	[6.10]
South	28.12	18.09	53.8	15.9	22.38	61.72
	[5.70]	[1.96]	[6.04]	[4.89]	[5.22]	[3.69]
Total	53.35	16.48**	30.17	50.32	19.96**	29.72
	[3.06]	[0.89]	[3.01]	[3.77]	[1.49]	[3.28]

## Table 7.3: % of individuals exempt from healthcare fees

	P135-II communes		non-P135-II communes			
	% exempt-	Reaso	ons (%)	% ex-	Reasons (%)	
	ed from health care fees	Having free health care certifi- cates	Having free health care certificates	empted from health care fees	Hav- ing free health care cer- tificates	Having free health care certificates
	I	Ethnicity	y	I	1	<u> </u>
Kinh and Hoa	63.45**	52.01	9.39	54.97**	44.78	7.32
	[2.53]	[2.77]	[1.50]	[3.25]	[4.06]	[1.48]
non-Kinh and non-Hoa	37.27	31.28	3.85	35.32	28.69	4.71
	[4.88]	[5.08]	[1.09]	[4.37]	[4.13]	[1.33]
	•	Daily langua	ages			
Absolutely no or little Vietnam-	64.69*	52.17	10.58	56.49*	45.11	9.54
ese	[2.82]	[3.07]	[1.79]	[3.55]	[4.84]	[2.09]
Mixed between Vietnamese	60.1	51.84	5.94*	54.25	47.66	2.64*
and ethnic languages	[4.36]	[4.37]	[1.53]	[5.36]	[5.35]	[0.99]
Absolutely no or little ethnic	61.79**	53.65**	6.07	47.18**	33.77**	6.8
languages	[5.02]	[7.18]	[3.13]	[4.33]	[5.14]	[2.49]
	Ger	der of house	hold head			
Male	55.68	45.97	7.57	50	40.94	6.3
	[2.72]	[2.85]	[1.12]	[3.03]	[3.39]	[1.09]
Female	45.65	37.07	6.91	43.84	33.92	8.5
	[4.66]	[3.88]	[1.96]	[4.26]	[3.85]	[3.07]
	Ge	ography of co	ommunes			
Coastal or delta	23.37	13.4	7.23	29.28	15.09	13.09
	[2.53]	[2.80]	[2.19]	[4.12]	[4.22]	[2.61]
Others	63.67***	54.24**	7.56	53.87***	46.13**	4.99
	[2.23]	[2.51]	[1.26]	[2.98]	[3.09]	[1.08]
		Regions	5			
North	64.75**	56.14**	6.7	55.57**	46.33**	5.99
	[2.89]	[3.16]	[1.63]	[2.73]	[3.03]	[1.43]
Centre	59.59	47.69	9.79***	49.45	45.76	2.21***
	[3.74]	[4.34]	[2.40]	[7.66]	[7.85]	[1.06]
South	35.33	26.42	6.65**	30.62	16.21	13.18**
	[5.69]	[5.95]	[1.72]	[4.04]	[4.14]	[2.45]
Total	54.48	44.91	7.49	49.27	40.11	6.56
	[2.85]	[2.88]	[1.08]	[2.91]	[3.28]	[1.15]

#### Table 7.4: % of individuals exempt from healthcare fees for health care center

	P135-II communes		non-P135-II communes			
	% exempt-	Reas	sons (%)	% ex-	Reasons (%)	
	ed from health care fees	Hav- ing free health care cer- tificates	Having free health care certificates	empted from health care fees	Hav- ing free health care cer- tificates	Having free health care certificates
		Ethnic	ity			
Kinh and Hoa	58.39	48.67	8	50.63	42.21	5.43
	[2.64]	[2.81]	[1.38]	[4.34]	[4.45]	[1.25]
non-Kinh and non-Hoa	28.76	24.66	2.97	24.3	20.75	1.81
	[4.61]	[4.76]	[0.92]	[4.05]	[3.85]	[0.64]
		Daily lang	uages			
Absolutely no or little Vietnam-	60.17	49.46	9.28	51.78	43.25	6.48
ese	[2.94]	[3.11]	[1.67]	[5.27]	[5.54]	[1.70]
Mixed between Vietnamese	54.99	47.99	4.59	50.64	44.33	2.19
and ethnic languages	[4.24]	[4.19]	[1.31]	[5.09]	[4.86]	[0.97]
Absolutely no or little ethnic	49.24	42.57*	4.34	40.05	27.28*	6.79
languages	[5.60]	[6.85]	[2.47]	[4.71]	[5.31]	[2.28]
	Gen	der of hous	sehold head			
Male	49.48	41.45	6.36	44.33	37.11	4.36
	[2.78]	[2.82]	[1.01]	[3.73]	[3.72]	[0.92]
Female	39.1	33	5.67	32.96	27.6	4.56
	[4.62]	[4.06]	[1.86]	[4.28]	[4.00]	[2.17]
	Ge	ography of	communes			
Coastal or delta	15.05	7.65	6.11	14.06	8.63	4.33
	[2.39]	[2.61]	[1.86]	[5.38]	[4.42]	[2.79]
Others	57.99**	50.07*	6.33	49.29**	42.38*	4.11
	[2.31]	[2.50]	[1.15]	[3.26]	[3.32]	[0.95]
		Regio	ns			
North	61.30**	53.74**	5.68	51.26**	43.25**	4.97
	[3.19]	[3.35]	[1.51]	[3.27]	[3.49]	[1.27]
Centre	51.22	41.68	8.12***	44.32	40.26	1.74***
	[3.48]	[3.99]	[2.14]	[7.75]	[7.77]	[0.93]
South	26.55	19.95	5.56	15.75	10.05	4.65
	[5.36]	[5.53]	[1.46]	[5.33]	[4.41]	[2.64]
Total	48.24	40.44	6.28	42.99	35.98	4.38
	[2.90]	[2.88]	[0.97]	[3.57]	[3.56]	[0.91]

#### Table 7.5: % of individuals exempt from healthcare fees for hospitals

	P135-II communes		non-P135-II communes			
	% ex-	Reaso	ons (%)	% exempt-	Rease	ons (%)
	empted from health care fees	Having free health care cer- tificates	Having free health care certificates	ed from health care fees	Hav- ing free health care cer- tificates	Having free health care certifi- cates
	I	Ethnic	ity			
Kinh and Hoa	13.5	10.57	2.42	15.34	11.78	2.73
	[1.07]	[0.93]	[0.55]	[1.11]	[0.97]	[0.87]
non-Kinh and non-Hoa	14.34	11.24	1.87	17.37	13.14	3.42
	[1.55]	[1.46]	[0.55]	[2.41]	[2.09]	[1.23]
		Daily lang	uages			
Absolutely no or little Vietnam-	11.84**	8.78*	2.61	15.82**	11.42*	3.92
ese	[1.11]	[0.90]	[0.67]	[1.43]	[1.02]	[1.34]
Mixed between Vietnamese	16.68	14.13	1.77	15.61	13.26	1.1
and ethnic languages	[2.10]	[1.89]	[0.59]	[2.15]	[1.97]	[0.41]
Absolutely no or little ethnic	20.41	18.18*	2.24	14.74	10.81*	1.87
languages	[2.94]	[3.23]	[1.20]	[3.01]	[2.59]	[1.28]
	Ge	nder of hous	ehold head			
Male	13.79	10.85	2.23	15.15	11.74	2.6
	[0.92]	[0.85]	[0.43]	[1.04]	[0.86]	[0.63]
Female	13.77**	10.41*	2.24	21.81**	15.42*	5.4
	[1.99]	[1.54]	[0.75]	[3.10]	[2.47]	[2.36]
	Ge	eography of o	communes			
Coastal or delta	9.59**	6.19	1.93***	17.39**	8.63	8.76***
	[1.65]	[1.40]	[0.88]	[2.23]	[2.27]	[1.90]
Others	15.12	12.23	2.34	16.03	13.2	1.81
	[1.01]	[0.90]	[0.48]	[1.15]	[0.96]	[0.48]
		Regio	ns			
North	13.87	11.7	1.81	16.52	13.51	1.95
	[1.26]	[1.13]	[0.53]	[1.36]	[1.16]	[0.63]
Centre	18.08	13.59	3.59*	15.09	12.82	1.39*
	[1.82]	[1.73]	[1.08]	[2.17]	[1.76]	[0.60]
South	10.22**	7.28	1.74***	16.97**	8.29	8.53***
	[1.44]	[1.26]	[0.68]	[2.15]	[2.15]	[1.81]
Total	13.79	10.8	2.23	15.93	12.17	2.93
	[0.93]	[0.83]	[0.42]	[1.04]	[0.91]	[0.72]

#### Table 7.6: % of individuals exempt from healthcare fees for other health carers

	P135-II communes		non-P135-II communes			
	% exempted	Rease	ons (%)	% ex-	% ex- Reasons (%)	
	from health care fees	Hav- ing free health care cer- tificates	Having free health care certificates	empted from health care fees	Hav- ing free health care cer- tificates	Having free health care certificates
		Ethnic	ity	L		L
Kinh and Hoa	1.01	0.65	0.07*	1.21	0.65	0.00*
	[0.24]	[0.19]	[0.04]	[0.50]	[0.35]	[0.00]
non-Kinh and non-Hoa	0.75	0.56	0	0.87	0.81	0
	[0.38]	[0.24]	[0.00]	[0.47]	[0.47]	[0.00]
		Daily lang	juages	-		-
Absolutely no or little Viet-	0.95	0.57	0.09*	1.14	0.48	0.00*
namese	[0.23]	[0.18]	[0.05]	[0.57]	[0.20]	[0.00]
Mixed between Vietnam-	1.18	0.84	0	1.46	1.17	0
ese and ethnic languages	[0.53]	[0.40]	[0.00]	[1.00]	[0.97]	[0.00]
Absolutely no or little eth-	1.11	0.85	0	0.95	0.41	0
nic languages	[0.52]	[0.48]	[0.00]	[0.59]	[0.31]	[0.00]
	Ge	nder of hous	sehold head			
Male	0.92	0.59	0.05*	1.1	0.71	0.00*
	[0.20]	[0.14]	[0.03]	[0.38]	[0.32]	[0.00]
Female	0.92	0.8	0	1.19	0.55	0
	[0.54]	[0.52]	[0.00]	[0.76]	[0.39]	[0.00]
	G	eography of	communes			
Coastal or delta	0.24	0.24	0	0	0	0
	[0.18]	[0.18]	[0.00]	[0.00]	[0.00]	[0.00]
Others	1.11	0.74	0.04	1.34	0.85	0
	[0.26]	[0.19]	[0.03]	[0.45]	[0.34]	[0.00]
		Regio	ns			
North	0.77	0.61	0.02	0.74	0.58	0
	[0.27]	[0.25]	[0.02]	[0.26]	[0.24]	[0.00]
Centre	1.83	1.01	0.09	2.83	1.56	0
	[0.61]	[0.32]	[0.07]	[1.35]	[1.05]	[0.00]
South	0.33	0.31	0	0.03	0	0
	[0.19]	[0.19]	[0.00]	[0.03]	[0.00]	[0.00]
Total	0.92	0.62	0.04*	1.11	0.69	0.00*
	[0.21]	[0.15]	[0.02]	[0.38]	[0.28]	[0.00]

#### Table 7.7: Satisfaction with health care services

	F	P135-II co	mmunes		noi	ו-P135-II	commune	s
	"Amount	Satisf	action lev	vel (%)	"Amount	Satisf	action lev	vel (%)
	paid for health care ser- vices ('000 VND)"	Happy with the quality of ser- vices	Quality is on aver- age	Not happy with the quality of ser- vices	paid for health care ser- vices ('000 VND)"	Happy with the quality of ser- vices	Quality is on aver- age	Not happy with the quality of ser- vices
		E	thnicity					
Kinh and Hoa	209.52	66.63	16.7	5.72	272.49	65.32	16.21	5.47
	[29.12]	[1.68]	[1.62]	[0.81]	[29.95]	[2.34]	[1.90]	[1.15]
non-Kinh and non-Hoa	686.59	70.04	11.37	3.33**	647.9	63.68	16.21	7.10**
	[84.52]	[2.64]	[2.06]	[0.79]	[65.88]	[2.81]	[2.47]	[1.53]
		Daily	languag	es				
Absolutely no or little Vietnam-	198.73	66.14	17.91	5.1	261.94	66.08	18.09	4.35
ese	[31.75]	[2.14]	[1.95]	[0.83]	[43.34]	[3.19]	[2.57]	[1.12]
Mixed between Vietnamese	247.59	65.43	14.8	7.72	242.82	60.81	14.37	8.85
and ethnic languages	[58.07]	[2.72]	[2.50]	[1.98]	[40.60]	[4.41]	[2.67]	[2.95]
Absolutely no or little ethnic	215.17	80.77*	6.97	4.54	404.51	71.27*	9.78	3.86
languages	[63.29]	[3.35]	[2.61]	[1.66]	[107.20]	[4.18]	[2.13]	[1.33]
	(	Gender of	househo	ld head				
Male	341.16	67.17	15.65	5.12	381.08	64.32	16.92	5.68
	[36.50]	[1.59]	[1.42]	[0.68]	[38.20]	[1.97]	[1.71]	[1.00]
Female	607.29	72.44	9.11	3.30*	383.64	68.8	10.94	7.92*
	[126.52]	[2.69]	[2.42]	[0.92]	[74.17]	[3.51]	[1.93]	[2.31]
		Geograph	ny of com	munes				
Coastal or delta	725.27	74.9	4.31	1.31	517.24	77.08	2.33	1.26
	[94.68]	[2.38]	[1.91]	[0.99]	[106.56]	[3.13]	[1.03]	[0.97]
Others	280.16	65.99	17.57	5.87	357.81	62.44	18.86	6.92
	[32.42]	[1.74]	[1.49]	[0.70]	[38.12]	[1.82]	[1.33]	[1.03]
		F	Regions					
North	236.95**	66.09	15.4	6.38	376.37**	63.44	16.64	5.5
	[34.71]	[1.71]	[1.65]	[1.03]	[45.50]	[2.13]	[1.36]	[1.14]
Centre	334.39	58.65	25.88	6.46*	318.76	59.18	24.88	10.63*
	[73.16]	[2.90]	[2.54]	[0.90]	[74.87]	[3.54]	[2.85]	[1.94]
South	634.51	79.25	3.46	1.09	501.85	77.54	2.24	1.21
	[78.03]	[2.54]	[1.45]	[0.73]	[99.37]	[2.94]	[0.96]	[0.90]
Total	67.8	14.87	4.9	4.9	64.85	16.21	5.94	5.94
	[1.50]	[1.44]	[0.65]	[0.65]	[1.87]	[1.55]	[0.94]	[0.94]

			13E    00mm	0001			1 404	13E    00mi	000110	
				2011			1-11011			
	Distance	Tir	me it takes to	o go by: (min	utes)	Distance	Tim	ie it takes to	o go by: (mir	nutes)
	in KM	Walk	Bycicle	<b>Motor bike</b>	<b>Public trans-</b>	in KM	Walk	Bycicle	Motor	<b>Public trans-</b>
					port				bike	port
				Ethnicit	,					
Kinh and Hoa	4.10**	40.15**	21.18	23.23	44.05	2.92**	27.71**	21.25	16.32	11.86
	[0.34]	[3.74]	[1.53]	[3.19]	[20.11]	[0.32]	[3.27]	[3.46]	[2.89]	[1.64]
non-Kinh and non-Hoa	3.05	16.87	17.02	14.29*	27.73*	2.46	21.77	18.29	11.05*	13.18*
	[0.46]	[4.27]	[2.27]	[1.19]	[3.51]	[0.28]	[4.31]	[2.10]	[1.31]	[2.69]
				Daily langu	ages					
Absolutely no or little Vietnamese	4.48***	44.59***	21.36	26.71	39.07	2.82***	28.25***	19.22	18.41	18.07
	[0.45]	[4.65]	[2.44]	[4.27]	[26.42]	[0.28]	[3.10]	[2.33]	[3.77]	[1.40]
Mixed between Vietnamese and	3.18	27.16	20.52	17.06	35	3.28	26.77	26.21	13.41	12.18
ethnic languages	[0.31]	[2.52]	[2.27]	[2.10]	[00.0]	[0.62]	[6.51]	[9.48]	[2.33]	[1.94]
Absolutely no or little ethnic lan-	3.12	31.44	22.41	12.66	666-	2.6	24.43	18.22	12.28	666-
guages	[0.41]	[7.89]	[3.11]	[1.77]	[00.0]	[0.51]	[13.96]	[2.37]	[2.22]	[0.00]
			Ger	nder of house	hold head					
Male	4.00**	38.31**	20.03	20.26	43.1	2.90**	27.33**	21.15	15.37	11.74
	[0.31]	[3.67]	[1.37]	[2.31]	[18.73]	[0.29]	[3.13]	[3.13]	[2.45]	[1.57]
Female	2.62	29.66	18.79	19.86**	666-	2.29	24.2	17.36	11.76**	-999
	[0.23]	[4.44]	[2.47]	[3.84]	[00.0]	[0.25]	[4.31]	[2.54]	[1.03]	[0.00]
			Ge	ography of c	ommunes					

Table 7.8: Distance to health centers

			2E    00mm	00011			] 404	01.0E II 00m	000100	
	Distance in	Ī	me it takes	to go by: (n	ninutes)	Distance in	Tim	it takes t	o go by: (n	iinutes)
	KM	Walk	Bycicle	Motor	Public trans-	ΚM	Walk	Bycicle	Motor	Public trans-
				bike	port				bike	port
				Ethnicit	Ŋ					
Kinh and Hoa	34.15	99.56	68.98	56.87	174.36	27.29	67.44	46.49	48.48	141.81
	[2.46]	[17.42]	[8.99]	[4.69]	[19.66]	[3.36]	[15.36]	[12.76]	[6.98]	[18.32]
non-Kinh and non-Hoa	45.8	135.62	29.47	35.93**	198.77	39.01	68.96	30.3	47.12**	314.48
	[6.46]	[110.83]	[4.47]	[2.81]	[37.42]	[4.57]	[11.11]	[7.60]	[4.29]	[157.33]
				Daily langu	ages					
Absolutely no or little Vietnamese	34.37**	107.79	65.27	57.99	187.00*	23.29**	86.84	56.01	51.75	122.78*
	[3.54]	[21.37]	[8.28]	[6.43]	[26.61]	[3.55]	[13.67]	[21.22]	[8.74]	[26.50]
Mixed between Vietnamese and ethnic	37.27	87.57**	74.13	56.45	173.02	35.52	38.88**	40.73	45.96	144.33
languages	[5.43]	[14.35]	[23.34]	[4.85]	[22.52]	[6.30]	[14.23]	[10.18]	[6:59]	[17.74]
Absolutely no or little ethnic languages	25.03	21.23	73.4	53.15**	88.24**	23.93	5	23.63	35.97**	232.18**
	[3.22]	[11.39]	[24.46]	[4.49]	[21.05]	[3.82]	[00.0]	[10.41]	[6.33]	[59.86]
			Gend	er of house	hold head					
Male	38.82*	102.35	47.91	49.94	180.42	30.66*	69.72	45.53	48.96	153.54
	[3.60]	[17.13]	[6.30]	[3.24]	[24.99]	[2.76]	[12.25]	[13.32]	[5.20]	[15.75]
Female	40.91	59.65	49.77	38.11	247.32	37.1	44.44	29.8	41.18	542.42
	[5.96]	[29.14]	[20.18]	[3.59]	[48.55]	[10.06]	[12.59]	[3.52]	[5.34]	[436.54]
			Geo	graphy of c	ommunes					
Coastal or delta	46.96**	-999	13.37	29.17	195.14	16.40**	-999	30	25.27	108.43
	[10.48]	[0.00]	[2.20]	[2.29]	[41.16]	[3.55]	[0.00]	[00.0]	[4.41]	[85.59]
Others	36.81	100.37	51.39	54.12	189.17	35.15	67.83	41.73	54.55	223.96
	[3.01]	[17.19]	[6.59]	[3.75]	[27.73]	[2.74]	[11.66]	[10.07]	[3.92]	[69.36]

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				Regions						
North	32.58	107.03	62.93	62.05	157.77	34.62	71.73	43.71	58.16	229.17
	[2.41]	[16.25]	[9.41]	[5.76]	[20.62]	[3.25]	[15.47]	[13.71]	[4.93]	[89.42]
Centre	41.07	86.44	56.35	44.64	270.42	37.12	61.55	36.62	45.59	207.1
	[66:9]	[41.94]	[10.46]	[4.44]	[63.32]	[5.24]	[18.93]	[0:50]	[5.00]	[34.02]
South	46.67***	666-	21.34	32.15	167.47	16.43***	666-	30	25.07	113.23
	[8.31]	[00.0]	[4.93]	[2.76]	[28.54]	[3.38]	[0.00]	[00.0]	[4.12]	[76.06]
Total	39.11*	100.37	48.22	48.18	187.56	31.61*	67.83	40.42	47.97	208.18
	[3.24]	[17.19]	[6.21]	[3.12]	[22.61]	[2.93]	[11.66]	[8.94]	[4.65]	[61.66]

		à	135-II commu	unes			uou	-P135-II com	munes	
	Distance	Ĩ	me it takes to	o go by: (mint	utes)	Distance	=	me it takes to	o go by: (min	utes)
	in KM	Walk	Bycicle	Motor bike	Public transport	in KM	Walk	Bycicle	Motor bike	Public trans- port
				Ethnic	sity					
Kinh and Hoa	10.49	65.36*	29.00**	32.19**	207.35	7.04	22.32*	15.90**	20.99**	200.59
	[1.52]	[23.33]	[4.40]	[2.65]	[61.58]	[1.80]	[4.62]	[2.62]	[3.49]	[64.74]
non-Kinh and non-Hoa	9.3	15.89	19.03	25.04	78.19*	9.08	16.79	19.14	22.1	179.23*
	[1.28]	[3.37]	[2.44]	[2.32]	[10.77]	[1.53]	[1.10]	[2.04]	[2.37]	[58.60]
				Daily lang	luages					
Absolutely no or little Vietnamese	9.84*	76.93*	33.33***	33.57**	228.53	5.57*	23.66*	13.02***	20.40**	217.87
	[1.90]	[28.29]	[6:59]	[3.56]	[113.16]	[1.47]	[5.55]	[2.34]	[3.94]	[78.69]
Mixed between Vietnamese and	12.67	24.47	22.75	28.59	187.66	12.5	17.26	18.14	24.95	236.62
ethnic languages	[2.36]	[6.08]	[2.92]	[3.83]	[57.53]	[4.29]	[4.72]	[5.17]	[4.72]	[77.57]
Absolutely no or little ethnic	9.29	5.52**	17.03	33.54*	666-	7.19	13.17**	23.36	19.76*	666-
languages	[2.91]	[1.58]	[2.41]	[7.47]	[00:0]	[1.71]	[2.67]	[4.60]	[2.80]	[00.0]
			G	ender of hous	sehold head					
Male	9.9	57.90*	24.23**	27.41**	89.68**	7.93	21.13*	17.41**	21.17**	212.33**
	[1.26]	[19.69]	[2.36]	[1.67]	[17.64]	[1.41]	[3.65]	[1.99]	[2.30]	[47.13]
Female	9.72	16.36	20.67	31.66	203.58**	7.94	17.73	18.63	25.2	74.22**
	[1.35]	[1.85]	[5.40]	[5.62]	[41.35]	[1.77]	[1.72]	[3.06]	[4.51]	[17.66]
			9	seography of	communes					
Coastal or delta	5.45***	16.1	17.32	22.57**	666-	2.45***	11.9	12.32	13.52**	666-
	[0.51]	[3,13]	[4.06]	[3.04]	[0.00]	[0.53]	[2.36]	[2.78]	[1,45]	[0.00]

Table 7.10: Distance to other health care suppliers

Others	13.45	76.01*	26.17*	32.53*	177.45	10.85	25.65*	19.92*	26.55*	196.15
	[1.63]	[25.32]	[3.15]	[2.32]	[34.55]	[1.44]	[4.08]	[1.94]	[2.40]	[46.65]
				Regio	ns					
North	14.86	117.83**	30.09*	34.86*	253.69	9.54	20.49**	18.67*	27.26*	157.87
	[3.16]	[40.51]	[6.12]	[2.71]	[85.82]	[2.15]	[3.15]	[2.45]	[3.39]	[62.01]
Centre	12.92	29.32	25.55	32.61	144.26	12.27	33.3	21.58	26.42	271.98
	[1.35]	[6.98]	[3.51]	[3.78]	[28.87]	[2.19]	[8.13]	[3.76]	[3.42]	[73.09]
South	5.64***	16.07	16.8	22.37***	666-	2.56***	11.9	12.42	13.47***	666-
	[0.51]	[3.03]	[3.13]	[2.83]	[0.00]	[0.53]	[2.36]	[2.68]	[1.39]	[0.00]
Total	9.87	50.07*	23.52*	28.05**	95.56*	7.93	20.74*	17.67*	21.53**	189.84*
	[1.12]	[16.96]	[2.50]	[1.82]	[19.75]	[1.25]	[3.28]	[1.82]	[2.16]	[44.89]

	P135-II co	ommunes	non-P135-I	I communes
	Gross enrollment rate	Net enroll- ment rate	Gross enroll- ment rate	Net enrollment rate
	Ethnicit	ty		
Kinh and Hoa	84.36	75.86	84.89	78.45
	[1.43]	[1.22]	[2.52]	[1.83]
non-Kinh and non-Hoa	86.35	82.14	80.46	79.26
	[4.09]	[2.64]	[3.18]	[3.02]
	Daily langu	ages		
Absolutely no or little Vietnamese	85.44	76	87.35	78.48
	[1.66]	[1.48]	[3.37]	[2.24]
Mixed between Vietnamese and ethnic	79.55	74.41	82.19	80.53
languages	[3.91]	[3.30]	[3.72]	[3.54]
Absolutely no or little ethnic languages	88.6	80.35	77.12	75.77
	[5.69]	[4.24]	[4.29]	[4.26]
G	ender of house	hold head		
Male	85.17	77.8	84.06	78.51
	[1.78]	[1.40]	[2.24]	[1.70]
Female	82.2	74.42	80.5	79.97
	[7.45]	[6.31]	[4.67]	[4.72]
G	eography of c	ommunes		
Coastal or delta	88.73	80.6	78.54	78.54
	[5.75]	[3.97]	[3.97]	[3.97]
Others	84.3	76.93	84.06	78.65
	[1.36]	[1.17]	[2.25]	[1.76]
	Region	s		
North	84.82	76.2	85.44	79.34
	[1.58]	[1.48]	[2.54]	[1.83]
Centre	86.75	80.37	79.79	76.65
	[2.73]	[2.03]	[4.99]	[4.81]
South	84.27	77.85	78.29	78.1
	[4.74]	[3.23]	[3.77]	[3.77]
Total	84.87	77.46	83.65	78.68
	[1.55]	[1.20]	[2.02]	[1.56]

### Table 7.11: Enrollment rate for primary education (%)

	P135-II co	ommunes	non-P135-II	communes
	Gross en- rollment rate	Net enroll- ment rate	Gross enrollment rate	Net enroll- ment rate
	Ethnicity			
Kinh and Hoa	62.43	54.64**	68.27	62.47**
	[2.45]	[2.11]	[3.00]	[2.81]
non-Kinh and non-Hoa	63.12	60.29**	73.04	72.55**
	[5.32]	[5.39]	[2.95]	[2.84]
	Daily language	S		
Absolutely no or little Vietnamese	59.64	50.94*	62.94	57.61*
	[2.54]	[2.20]	[2.83]	[3.10]
Mixed between Vietnamese and ethnic	71.58	64.33	74.46	68.57
languages	[4.63]	[3.89]	[5.84]	[4.38]
Absolutely no or little ethnic languages	76.63	73.19	87.78	79.86
	[5.63]	[4.46]	[5.71]	[4.56]
Geno	ler of househol	d head		
Male	64.38*	57.76**	70.39*	65.73**
	[2.34]	[2.23]	[2.54]	[2.44]
Female	48.89	43.22*	61.11	59.24*
	[8.61]	[7.44]	[5.57]	[5.39]
Geo	graphy of comr	nunes		
Coastal or delta	41.99***	40.02***	67.64***	65.78***
	[5.33]	[5.62]	[5.00]	[5.04]
Others	67.32	59.68*	70.32	65.51*
	[2.03]	[1.89]	[2.65]	[2.50]
	Regions			
North	67.01	58.05*	70.47	64.97*
	[2.43]	[2.31]	[3.25]	[3.07]
Centre	68.63	63.67	69.9	67.07
	[3.79]	[3.37]	[4.44]	[4.15]
South	46.79***	43.95***	67.69***	65.92***
	[5.42]	[5.27]	[4.64]	[4.69]
Total	62.61**	56.10***	69.53**	65.13***
	[2.47]	[2.23]	[2.36]	[2.24]

#### Table 7.12: Enrollment rate for lower secondary education (%)

	P135-II co	mmunes	non-P135-II	communes
	Gross enroll- ment rate	Net enroll- ment rate	Gross enrollment rate	Net enroll- ment rate
	Ethnicity			
Kinh and Hoa	30.75**	25.15**	40.56**	34.03**
	[2.60]	[2.16]	[4.25]	[3.92]
non-Kinh and non-Hoa	55.83	51.7	59.98	56.31
	[4.96]	[4.76]	[5.94]	[5.65]
Da	ily languages	-	-	-
Absolutely no or little Vietnamese	24.52	19.79	31.73	24.93
	[2.81]	[2.16]	[4.25]	[3.83]
Mixed between Vietnamese and ethnic lan-	43.19	35.81	52.02	46.16
guages	[4.32]	[4.13]	[5.62]	[5.61]
Absolutely no or little ethnic languages	47.15	40.07	59.9	53.85
	[8.84]	[7.82]	[9.92]	[7.93]
Gender	of household h	ead		
Male	38.09	32.45	44.64	39.12
	[2.50]	[2.17]	[3.76]	[3.59]
Female	40.9	39.53	54.65	47.26
	[6.90]	[6.89]	[8.08]	[7.55]
Geogra	phy of commur	ies		
Coastal or delta	32.64*	31.79*	12.72*	12.72*
	[6.44]	[6.16]	[8.00]	[8.00]
Others	39.37***	33.31***	50.74***	44.11***
	[2.53]	[2.26]	[3.20]	[3.29]
	Regions			
North	37.77***	32.03***	52.57***	45.54***
	[3.21]	[2.90]	[3.70]	[3.71]
Centre	44.46	37.27	45.16	39.54
	[4.76]	[4.19]	[7.48]	[8.37]
South	33.44*	31.38*	14.76*	14.76*
	[5.03]	[4.60]	[7.68]	[7.68]
Total	38.41*	33.27	45.87*	40.12
	[2.37]	[2.11]	[3.77]	[3.63]

### Table 7.13: Enrollment rate for higher secondary education (%)

### Table 7.14: reasons for not attending school (%)

		P135-II co	ommunes		nc	on-P135-II	commun	es
	Over aged	Don't like to study	Working	Other	Over aged	Don't like to study	Work- ing	Other
			Ethnicity					
Kinh and Hoa	35.5	4.01	16.52	14.80**	34.67	3.26	20.1	12.86**
	[1.23]	[0.37]	[1.22]	[0.63]	[1.72]	[0.36]	[1.97]	[0.75]
non-Kinh and non-Hoa	43.37**	2.02	17.1	10.86	34.81**	1.93	21.53	9.17
	[1.73]	[0.54]	[1.56]	[0.88]	[2.98]	[0.44]	[3.02]	[0.93]
		Dai	ly languag	es	-	-	-	
Absolutely no or little Viet-	36.15	3.69	15.62	15.52*	35.63	3.71	18.94	13.61*
namese	[1.46]	[0.36]	[1.36]	[0.69]	[2.06]	[0.47]	[2.13]	[0.85]
Mixed between Vietnamese	34.41	4.36	18.83	12.66	36.19	2.77	18.71	11.39
and ethnic languages	[1.61]	[0.83]	[1.85]	[1.14]	[2.59]	[0.59]	[2.86]	[1.22]
Absolutely no or little ethnic	27.74	6.81*	22.43	12.71	26.76	2.17*	28.08	11.99
languages	[3.48]	[2.56]	[4.56]	[2.13]	[2.41]	[0.86]	[4.17]	[1.94]
		Gender o	of househo	ld head				
Male	37.26	3.47	16.97*	13.75***	34.6	2.9	20.42*	11.59***
	[1.15]	[0.33]	[1.04]	[0.51]	[1.56]	[0.31]	[1.67]	[0.64]
Female	42.71*	3.1	14.08	12.67	35.60*	3.08	20.8	14.57
	[2.51]	[0.77]	[2.32]	[1.49]	[2.69]	[1.08]	[3.52]	[2.05]
		Geogra	ohy of com	munes				
Coastal or delta	52.27	2.15	11.44	12.61	49.68	2.42	12.4	11.88
	[1.83]	[0.97]	[2.03]	[1.49]	[2.62]	[0.84]	[2.17]	[1.36]
Others	34.38	3.75	17.82*	13.98**	32.23	3	21.62*	11.99**
	[0.98]	[0.35]	[1.13]	[0.55]	[1.52]	[0.36]	[1.98]	[0.74]
			Regions		_	_		
North	31.72	4.51***	19.54	13.98	29.65	2.90***	24.19	12.4
	[1.33]	[0.48]	[1.58]	[0.72]	[1.81]	[0.39]	[2.40]	[0.84]
Centre	37.92*	2.32	14.03	14.02*	41.35*	3.44	11.98	10.69*
	[1.27]	[0.53]	[1.72]	[0.96]	[1.54]	[0.89]	[2.37]	[1.51]
South	50	2.34	13.03	12.89	49.31	2.4	12.98	11.65
	[1.78]	[0.75]	[1.80]	[1.20]	[2.40]	[0.77]	[2.02]	[1.34]
Total	37.8	3.43	16.69*	13.64**	34.71	2.92	20.46*	11.92**
	[1.23]	[0.33]	[1.05]	[0.52]	[1.56]	[0.31]	[1.73]	[0.64]

	P1	35-II commu	unes	non-F	P135-II com	munes
	Primary	Lower second- ary	Higher sec- ondary	Primary	Lower second- ary	Higher secondary
		Ethnicity				
Kinh and Hoa	96.08	90.85*	83.11***	96.98	83.70*	63.40***
	[0.86]	[1.87]	[2.73]	[0.95]	[3.34]	[4.79]
non-Kinh and non-Hoa	73.72	46.98	47.97	77.62	52.45	39.98
	[4.23]	[6.43]	[6.59]	[4.72]	[6.97]	[7.70]
	-	Daily langua	iges			
Absolutely no or little Vietnamese	97.46	92.96	84.69*	97.06	87.82	73.62*
	[0.72]	[1.51]	[2.82]	[1.04]	[2.83]	[5.65]
Mixed between Vietnamese and	93.93	89.63	85.04***	96.57	87.84	62.05***
ethnic languages	[3.47]	[3.94]	[4.07]	[1.60]	[3.43]	[6.46]
Absolutely no or little ethnic	84.88**	67.3	64.01**	97.70**	55.92	32.02**
languages	[6.11]	[9.07]	[11.21]	[1.72]	[11.61]	[8.30]
	Gend	er of housel	nold head			
Male	90.83	80.58	69.57**	93.01	76.42	55.99**
	[2.01]	[2.85]	[3.46]	[1.71]	[3.63]	[4.78]
Female	90.32	81.52	62.02	86.76	67.94	50.35
	[2.96]	[5.79]	[9.47]	[4.80]	[8.04]	[12.11]
	Geog	raphy of co	mmunes			
Coastal or delta	69.56***	52.18	64.15	92.08***	74.84	40.9
	[5.55]	[10.71]	[11.53]	[5.06]	[12.38]	[30.61]
Others	95.87	83.83*	69.18**	92.3	75.57*	54.90**
	[0.83]	[2.63]	[3.76]	[2.10]	[3.83]	[4.73]
		Regions				
North	97.17*	86.96**	68.08*	93.74*	76.71**	54.19*
	[0.78]	[2.57]	[4.61]	[1.72]	[4.44]	[5.57]
Centre	94.39	83.43	74.34	87.44	72.63	60.44
	[1.83]	[5.33]	[6.77]	[6.47]	[7.70]	[7.64]
South	73.55***	51.23	61.21	92.44***	74.09	35.02
	[4.79]	[8.66]	[10.09]	[4.68]	[11.54]	[25.45]
Total	90.79	80.66	68.71**	92.47	75.69	55.27**
	[1.88]	[2.71]	[3.50]	[1.87]	[3.58]	[4.70]

#### Table 7.15: Exemption from paying fees and school contribution (%)

	P1	35-II commur	nes	non-	P135-II com	munes
	Primary	Lower secondary	Higher secondary	Primary	Lower second- ary	Higher secondary
		Ethnicity				
Kinh and Hoa	105.67	133.80**	331.16*	138.05	199.92**	424.03*
	[13.42]	[13.94]	[29.53]	[15.41]	[22.65]	[39.77]
non-Kinh and non-Hoa	591.71	256.69	599.1	247.6	258.98	509.95
	[413.24]	[37.04]	[75.48]	[18.16]	[27.40]	[84.80]
		Daily langua	ges			
Absolutely no or little Vietnamese	81.39	124.61	303.6	104.48	169.02	382.11
	[12.37]	[13.97]	[28.89]	[13.73]	[23.38]	[58.10]
Mixed between Vietnamese and	122.62	118.39**	368.94	134.3	172.93**	366.51
ethnic languages	[19.71]	[9.00]	[66.54]	[23.10]	[22.13]	[43.41]
Absolutely no or little ethnic	276.03	256.58	364.35***	306.71	347.54	655.93***
languages	[42.65]	[66.07]	[42.84]	[36.00]	[52.83]	[72.29]
	Gend	er of househ	old head			
Male	137.2	172.15*	423.88	167.43	215.89*	439.33
	[17.35]	[17.37]	[34.38]	[16.00]	[19.62]	[36.30]
Female	1489.56	202.19	664.54	202.86	248.62	566.98
	[1417.72]	[45.36]	[141.22]	[30.24]	[47.17]	[186.70]
	Geog	graphy of cor	nmunes			
Coastal or delta	66.67	92.58	293.97	41.82	92.45	203.43
	[14.01]	[12.51]	[73.97]	[21.45]	[17.82]	[18.61]
Others	338.09	187.17*	457.01	184.83	235.45*	468.45
	[180.33]	[20.24]	[44.92]	[16.17]	[19.19]	[45.28]
		Regions				
North	122.41***	143.15***	362.06*	193.87***	250.14***	484.56*
	[17.05]	[12.98]	[30.43]	[20.74]	[21.87]	[55.61]
Centre	695.02	159.91	451.42	161.92	172.26	384.66
	[565.29]	[20.40]	[87.76]	[27.03]	[25.94]	[57.07]
South	164.15**	286.85	702.98*	49.10**	160.62	321.20*
	[50.78]	[80.29]	[166.77]	[22.78]	[77.47]	[134.96]
Total	273.21	174.62*	449.99	170.37	218.96*	456.69
	[137.58]	[17.91]	[41.70]	[15.57]	[18.34]	[43.06]

## Table 7.16: Amount paid for schooling ('000 VND)

	D135-II o	ommunes	non-D135-II	communes
			Distance in	
	KM	to go by walk (minutes)"	KM	takes to go by walk (minutes)"
	Ethnicity			•
Kinh and Hoa	1.46	21.5	1.66	21.09
	[0.10]	[1.04]	[0.13]	[1.13]
non-Kinh and non-Hoa	1.75	18.61	1.94	20.48
	[0.17]	[1.49]	[0.29]	[1.85]
	Daily langua	iges		
Absolutely no or little Vietnamese	1.37	21.8	1.65	21.45
	[0.09]	[1.17]	[0.17]	[1.36]
Mixed between Vietnamese and ethnic	1.51	18.82	1.73	20.18
languages	[0.22]	[1.49]	[0.22]	[1.44]
Absolutely no or little ethnic languages	2.71	22	1.58	20.78
	[0.98]	[3.22]	[0.20]	[3.52]
Ge	nder of househ	nold head		
Male	1.51	21.02	1.76	21.02
	[0.09]	[0.94]	[0.13]	[1.04]
Female	1.76	21	1.34	20.67
	[0.23]	[2.79]	[0.17]	[2.12]
Ge	ography of co	mmunes		
Coastal or delta	1.56**	21.75**	1.01**	16.40**
	[0.13]	[1.80]	[0.19]	[1.67]
Others	1.53*	21.02	1.85*	21.7
	[0.10]	[1.03]	[0.13]	[1.10]
	Regions			
North	1.55*	23.5	1.87*	22.96
	[0.12]	[1.31]	[0.14]	[1.35]
Centre	1.54	17.06	1.81	18.23
	[0.20]	[1.56]	[0.32]	[1.58]
South	1.51**	19.65	1.00**	16.09
	[0.12]	[1.88]	[0.18]	[1.53]
Total	1.53	21.02	1.73	20.99
	[0.08]	[0.91]	[0.12]	[1.01]

#### Table 7.17: Distance to the primary school

	P135-II c	ommunes	non-P135-II	communes
	Distance in KM	"Time it takes to go by walk (minutes)"	Distance in KM	"Time it takes to go by walk (minutes)"
	Ethnici	ty		
Kinh and Hoa	5.81	37.64	6.91	29.69
	[0.65]	[2.57]	[2.46]	[4.39]
non-Kinh and non-Hoa	4.07	20.74	2.61	26.51
	[1.00]	[3.57]	[0.36]	[4.11]
	Daily langu	uages		
Absolutely no or little Vietnamese	6.27*	39.61*	4.42*	30.20*
	[0.86]	[2.69]	[0.64]	[4.20]
Mixed between Vietnamese and eth-	4.5	31.07	4.92	30.28
nic languages	[0.60]	[3.86]	[0.85]	[5.85]
Absolutely no or little ethnic lan-	5.31	44.93	22.5	31.28
guages	[0.97]	[8.51]	[19.13]	[7.86]
	Gender of hous	ehold head		
Male	5.44	35.14	6.02	29.28
	[0.59]	[2.26]	[2.00]	[3.37]
Female	5.02	37.93	3.52	25.42
	[0.78]	[6.63]	[0.82]	[7.00]
	Geography of c	ommunes		
Coastal or delta	2.5	22.5	1.94	20.6
	[0.47]	[6.21]	[0.33]	[2.45]
Others	5.8	36.55	6.44	30.04
	[0.63]	[2.44]	[2.14]	[3.94]
	Regior	is	•	
North	5.6	38.91	7.27	34.16
	[0.80]	[3.18]	[2.86]	[5.39]
Centre	6.68*	31.55*	4.04*	22.20*
	[1.22]	[3.44]	[0.66]	[3.69]
South	2.93*	21.73	1.98*	20.01
	[0.42]	[4.77]	[0.31]	[2.40]
Total	5.41	35.32	5.81	28.94
	[0.57]	[2.30]	[1.84]	[3.54]

#### Table 7.18: Distance to the lower secondary school

	P135-II co	ommunes	non-P135-II	communes
	Distance in KM	"Time it takes to go by walk (minutes)"	Distance in KM	"Time it takes to go by walk (minutes)"
	Ethnic	ity		
Kinh and Hoa	20.91***	41.67	14.65***	45.15
	[2.03]	[6.23]	[1.28]	[7.90]
non-Kinh and non-Hoa	12.05	18.32	9.82	20.81
	[2.07]	[11.58]	[1.44]	[4.26]
	Daily lang	uages		•
Absolutely no or little Vietnamese	22.40**	44.22	14.07**	45.22
	[2.83]	[6.17]	[1.54]	[10.47]
Mixed between Vietnamese and	17.7	35.67	18.09	44.31
ethnic languages	[2.20]	[8.79]	[2.29]	[12.34]
Absolutely no or little ethnic lan-	26.50**	-999	10.25**	-999
guages	[7.24]	[0.00]	[1.83]	[0.00]
	Gender of hous	sehold head		
Male	17.44**	37.19	13.12**	39
	[1.55]	[7.36]	[0.95]	[6.96]
Female	16.17	25.21	11.92	31.79
	[4.34]	[12.03]	[2.98]	[15.11]
	Geography of	communes		
Coastal or delta	7.52	-999	7.13	-999
	[0.85]	[0.00]	[0.29]	[0.00]
Others	18.97***	36.35	13.10***	38.17
	[1.74]	[6.57]	[1.04]	[6.71]
	Regio	ns		
North	19.94***	38.03	12.58***	37.37
	[2.39]	[9.08]	[1.11]	[6.82]
Centre	18.48	33.38	15.73	69.27
	[2.78]	[10.50]	[2.73]	[24.74]
South	9.02*	-999	6.92*	-999
	[1.06]	[0.00]	[0.31]	[0.00]
Total	17.29**	36.35	12.97**	38.17
	[1.53]	[6.57]	[1.00]	[6.71]

## Table 7.19: Distance to the higher secondary school

## Table 7.20: Source of Drinking water (%)

		P135-II coi	mmunes		non-P13	5-II commune	es	
	Piped, bought, filtered spring, and rain water	Drilled well with pump, dug/con- structed well, soil wells with protec- tion walls soil wells without protection walls	River, lake, pond and other sources of water	Clean water	Piped, bought, filtered spring, and rain water	Drilled well with pump, dug/con- structed well, soil wells with protec- tion walls soil wells without protection walls	River, lake, pond and other sources of water	Clean water
	•		Ethnici	ty	•		•	•
Kinh and Hoa	13.28	29.74***	56.98**	35.71*	11.17	47.24***	41.59**	47.22*
	[2.73]	[2.85]	[3.73]	[3.62]	[4.93]	[5.35]	[5.14]	[5.08]
non-Kinh and non-Hoa	16.62*	77.38	6	88.04**	6.83*	83.67	9.5	78.53**
	[4.96]	[5.25]	[1.63]	[2.26]	[3.22]	[4.46]	[3.57]	[4.13]
			Daily langu	lages				
Absolutely no or little	15.32	21.85**	62.83**	31.94*	16.97	37.62**	45.41**	45.77*
Vietnamese	[3.21]	[2.93]	[4.31]	[4.29]	[6.86]	[6.45]	[6.52]	[6.84]
Mixed between Viet-	7.94*	41.53*	50.53	36.8	1.69*	54.79*	43.52	42.15
namese and ethnic languages	[3.20]	[4.48]	[4.51]	[3.95]	[1.25]	[6.62]	[6.54]	[5.13]
Absolutely no or little	10.41	66.38	23.21	65.74	2.28	75.54	22.18	61.21
ethnic languages	[6.18]	[8.28]	[6.65]	[6.28]	[2.07]	[5.82]	[5.46]	[6.49]
		Gend	ler of house	ehold head		-	-	
Male	13.9	43.67**	42.43	50.64	9.76	56.23**	34.01	55
	[2.54]	[3.14]	[3.43]	[3.54]	[3.77]	[4.65]	[4.29]	[4.29]
Female	17.48	57.71	24.81	68.71	10.78	67.36	21.86	64.19
	[4.35]	[4.41]	[4.02]	[4.68]	[4.17]	[5.08]	[4.21]	[4.83]
		Geo	graphy of c	ommunes				
Coastal or delta	42.85	52.58	4.57	95.43**	48.46	51.54	0.00**	100.00**
	[6.66]	[7.30]	[2.14]	[2.14]	[18.92]	[18.92]	[0.00]	[0.00]
Others	6.79	43.02***	50.19**	41.46	3.67	58.81***	37.51**	49.09
	[1.49]	[3.60]	[3.54]	[3.37]	[1.22]	[4.43]	[4.34]	[3.80]
			Region	S				
North	9.61*	30.05***	60.34***	33.18***	4.70*	54.33***	40.97***	49.03***
	[2.20]	[4.14]	[4.21]	[3.81]	[1.56]	[5.08]	[4.98]	[4.49]
Centre	0.83	57.10*	42.08	46.11	0	74.29*	25.71	48.85
	[0.56]	[5.30]	[5.24]	[5.05]	[0.00]	[8.54]	[8.54]	[7.19]
South	34.39	59.96	5.65*	92.13	45.16	53.82	1.02*	97.05
	[6.17]	[6.78]	[2.41]	[2.56]	[17.57]	[17.53]	[1.16]	[2.48]
Total	14.4	45.64**	39.97	53.17	9.91	57.87**	32.23	56.35
	[2.58]	[3.17]	[3.46]	[3.63]	[3.66]	[4.53]	[4.13]	[4.14]

## Table 7.21: Source of living water (%)

		P135-II con	nmunes			non-P135-II	communes	;
	Piped, bought, filtered spring, and rain water	Drilled well with pump, dug/con- structed well, soil wells with protec- tion walls soil wells without protection walls	River, lake, pond and other sources of water	Clean water	Piped, bought, filtered spring, and rain water	Drilled well with pump, dug/con- structed well, soil wells with protec- tion walls soil wells without protection walls	River, lake, pond and other sources of water	Clean water
			Ethnici	ty				
Kinh and Hoa	8.48	30.80***	60.72***	32.13**	8.74	49.20***	42.07***	46.59**
	[1.85]	[3.25]	[3.48]	[3.34]	[3.65]	[5.09]	[4.98]	[4.88]
non-Kinh and non-	6.95*	85.27	7.79	86.06	2.07*	87.96	9.97	78.42
Ноа	[2.70]	[3.48]	[1.94]	[2.44]	[1.00]	[3.70]	[3.68]	[4.19]
	-		Daily langu	lages				
Absolutely no or little	9.83	22.31**	67.85***	27.24**	13.84	40.12**	46.04***	44.87**
Vietnamese	[2.22]	[3.27]	[3.80]	[3.78]	[5.61]	[6.26]	[6.40]	[6.73]
Mixed between Viet-	4.25**	44.69	51.07	36.05	0.49**	56.06	43.45	42.73
namese and ethnic languages	[1.43]	[4.59]	[4.57]	[3.97]	[0.30]	[6.56]	[6.55]	[5.17]
Absolutely no or little	9.33	66.61	24.07	64.66	0.84	76.25	22.91	59.77
ethnic languages	[5.57]	[8.27]	[6.54]	[6.23]	[0.65]	[5.89]	[5.67]	[6.51]
		Gend	er of house	ehold head	d			
Male	7.12	47.01**	45.86**	47.27	6.52	59.00**	34.48**	54.54
	[1.38]	[3.42]	[3.39]	[3.49]	[2.64]	[4.52]	[4.21]	[4.19]
Female	13.18	61.03	25.79	67.73	8.36	69.25	22.38	63.67
	[3.63]	[4.56]	[4.11]	[4.81]	[4.10]	[5.15]	[4.28]	[4.88]
		Geog	graphy of c	ommunes	;			
Coastal or delta	18.59	70.58	10.82	89.18	27.8	69.21	3	97
	[5.17]	[7.58]	[4.18]	[4.18]	[15.19]	[17.53]	[2.79]	[2.79]
Others	5.18	42.37***	52.45***	39.27*	3.43	58.99***	37.58***	49.03*
	[1.18]	[3.61]	[3.54]	[3.38]	[1.15]	[4.46]	[4.37]	[3.85]
			Region	s				
North	7.61	28.75***	63.63***	30.05***	4.31	54.82***	40.87***	48.95***
	[1.80]	[4.10]	[4.08]	[3.71]	[1.47]	[5.12]	[5.02]	[4.56]
Centre	0.19	56.79	43.02	45.14	0.29	73.31	26.4	48.85
	[0.14]	[5.20]	[5.18]	[5.04]	[0.21]	[8.60]	[8.60]	[7.19]
South	15.48	74.22	10.3	87.4	25.91	70.28	3.81	94.26
	[4.15]	[6.23]	[3.60]	[3.65]	[14.02]	[16.13]	[2.73]	[3.30]
Total	7.97	48.98**	43.06*	50.13	6.79	60.51**	32.70*	55.88
	[1.54]	[3.45]	[3.45]	[3.61]	[2.65]	[4.40]	[4.07]	[4.07]

## Table 7.22: Main source of lighting (%)

		P135-II cor	nmunes		n	on-P135-I	commune	S
	Electricity	Battery lamp, resin torch	Gas, oil, kero- sene lamps	Other	Elec- tricity	Battery lamp, resin torch	Gas, oil, kero- sene lamps	Other
	L	L	Ethnicity					
Kinh and Hoa	0.63***	0.04	0.20***	0.13	0.77***	0.03	0.11***	0.09
	[0.03]	[0.01]	[0.02]	[0.02]	[0.04]	[0.02]	[0.02]	[0.02]
non-Kinh and non-Hoa	0.90***	0.01	0.08***	0	0.98***	0	0.02***	0
	[0.02]	[0.01]	[0.02]	[0.00]	[0.01]	[0.00]	[0.01]	[0.00]
	-	Da	ily languag	jes	-	-		
Absolutely no or little Viet-	0.57**	0.04	0.24**	0.14	0.71**	0.03	0.14**	0.11
namese	[0.04]	[0.01]	[0.03]	[0.02]	[0.05]	[0.02]	[0.03]	[0.03]
Mixed between Vietnam-	0.75	0.02	0.1	0.13	0.83	0.04	0.06	0.07
ese and ethnic languages	[0.04]	[0.01]	[0.02]	[0.03]	[0.05]	[0.03]	[0.02]	[0.03]
Absolutely no or little eth-	0.82	0.03	0.1	0.06	0.92	0	0.04	0.04
nic languages	[0.06]	[0.02]	[0.04]	[0.03]	[0.04]	[0.00]	[0.02]	[0.02]
		Gender	of househo	old head				
Male	0.70***	0.03	0.17***	0.1	0.82***	0.02	0.09***	0.07
	[0.03]	[0.01]	[0.02]	[0.02]	[0.03]	[0.01]	[0.02]	[0.02]
Female	0.82**	0.02	0.13*	0.03	0.91**	0.01	0.06*	0.02
	[0.03]	[0.01]	[0.03]	[0.01]	[0.03]	[0.01]	[0.02]	[0.01]
		Geogra	phy of con	nmunes				
Coastal or delta	0.81	0	0.18*	0.01	0.92	0.01	0.07*	0
	[0.04]	[0.00]	[0.04]	[0.00]	[0.05]	[0.01]	[0.04]	[0.00]
Others	0.69***	0.04	0.16***	0.12	0.81***	0.02	0.09***	0.07
	[0.03]	[0.01]	[0.02]	[0.02]	[0.04]	[0.01]	[0.02]	[0.02]
			Regions					
North	0.61***	0.04	0.21***	0.15**	0.81***	0.03	0.09***	0.07**
	[0.04]	[0.01]	[0.03]	[0.03]	[0.04]	[0.02]	[0.02]	[0.02]
Centre	0.81	0.02	0.08	0.09	0.84	0.01	0.06	0.1
	[0.04]	[0.01]	[0.02]	[0.02]	[0.08]	[0.00]	[0.03]	[0.07]
South	0.83	0.01	0.15	0	0.88	0.03	0.09	0
	[0.03]	[0.01]	[0.03]	[0.00]	[0.06]	[0.02]	[0.04]	[0.00]
Total	0.72***	0.03	0.16***	0.09	0.83***	0.02	0.08***	0.07
	[0.03]	[0.01]	[0.02]	[0.01]	[0.03]	[0.01]	[0.02]	[0.02]

#### Table 7.23: Using electricity (%)

	P135-II co	ommunes	non-P135-I	l communes
	Using elec- tricity	Amount paid	Using elec- tricity	Amount paid
	Ethnicity			
Kinh and Hoa	66.72**	178.11***	77.94**	265.01***
	[3.03]	[13.57]	[3.83]	[22.33]
non-Kinh and non-Hoa	91.09**	456.22	97.03**	501.05
	[2.20]	[22.37]	[1.09]	[44.24]
C	aily languages	6		
Absolutely no or little Vietnamese	61.18*	147.29**	71.46*	217.19**
	[3.38]	[11.77]	[4.74]	[25.11]
Mixed between Vietnamese and ethnic	77.94	236.8	86.75	295.74
languages	[3.81]	[27.88]	[3.95]	[36.52]
Absolutely no or little ethnic languages	84.94	300.82**	91.54	409.31**
	[5.63]	[26.93]	[3.77]	[35.30]
Gende	r of household	l head		
Male	73.31**	262.92**	82.35**	326.43**
	[2.47]	[16.08]	[3.07]	[24.33]
Female	84.36	320.08	90.26	377.13
	[2.88]	[36.16]	[2.70]	[40.93]
Geog	raphy of comm	unes		
Coastal or delta	81.29	404.75	89.89	447.43
	[4.05]	[36.54]	[4.46]	[56.85]
Others	72.62**	233.68**	82.41**	316.88**
	[2.85]	[16.41]	[3.29]	[27.86]
	Regions			
North	65.25***	186.87***	82.41***	333.06***
	[3.94]	[15.75]	[3.65]	[33.72]
Centre	81.18	257.93	84.39	267.71
	[3.98]	[25.53]	[7.80]	[40.24]
South	84.25	420.42	87.11	424.44
	[3.29]	[31.15]	[5.13]	[55.74]
Total	74.85**	270.92**	83.51**	333.87**
	[2.38]	[16.97]	[2.85]	[25.03]

### Table 7.24: Type of toilet the household has (%)

		P135-II co	ommunes		nc	n-P135-II	commune	s
	Flush toilet with septic tank/sew- age pipes	Suilabh	Double vault compost latrine	Other	Flush toilet with septic tank/sew- age pipes	Suilabh	Double vault com- post latrine	Other
			Ethnici	ity	•	•		
Kinh and Hoa	2.54*	0.82*	2.53***	94.11***	6.08*	2.39*	8.71***	82.82***
	[0.96]	[0.21]	[0.49]	[1.04]	[1.76]	[0.85]	[1.81]	[2.48]
non-Kinh and non-Hoa	10.54	5.55	11.80*	72.11**	15.47	4.72	19.75*	60.05**
	[3.13]	[1.54]	[2.76]	[4.32]	[2.91]	[1.09]	[3.54]	[4.23]
			Daily lange	uages				
Absolutely no or little	2.02	0.63	1.32**	96.03***	5.12	2.54	4.22**	88.12***
Vietnamese	[1.03]	[0.22]	[0.33]	[1.11]	[2.24]	[1.32]	[1.15]	[2.47]
Mixed between Viet-	3.91	0.93	3.86	91.30*	5.64	1.19	7.66	85.52*
namese and ethnic languages	[1.71]	[0.39]	[1.45]	[2.09]	[1.66]	[0.63]	[1.96]	[2.46]
Absolutely no or little	3.13*	2.4	11.28**	83.19***	10.42*	3.61	28.83**	57.14***
ethnic languages	[1.28]	[1.29]	[2.80]	[3.01]	[4.07]	[1.26]	[6.75]	[6.94]
		Gend	ler of hous	ehold head				
Male	4.30*	2.23	5.61***	87.85***	8.00*	3.14	12.19***	76.68***
	[1.26]	[0.63]	[1.00]	[1.80]	[1.67]	[0.67]	[2.16]	[2.72]
Female	10.77	3.43	5.7	80.1	13.59	2.66	10.45	73.3
	[4.37]	[1.15]	[1.74]	[4.01]	[3.57]	[1.24]	[2.53]	[3.99]
		Geo	graphy of c	ommunes				
Coastal or delta	17.14	1.78	1.54	79.54	21.38	5.92	0	72.71
	[5.37]	[1.24]	[0.99]	[6.69]	[7.05]	[4.13]	[0.00]	[7.05]
Others	2.01***	2.57	6.73***	88.69***	6.70***	2.56	14.12***	76.61***
	[0.44]	[0.68]	[1.25]	[1.50]	[1.35]	[0.50]	[2.14]	[2.87]
			Regior	าร	1			
North	1.52***	0.82***	5.75***	91.90***	7.49***	2.68***	15.71***	74.11***
	[0.34]	[0.25]	[1.12]	[1.23]	[1.69]	[0.56]	[2.52]	[3.49]
Centre	2.93	2.27	9.26	85.53	4.12	1.22	8.92	85.74
	[1.20]	[0.69]	[3.25]	[3.50]	[1.13]	[0.53]	[4.21]	[4.46]
South	13.49	5.12	2.3	79.1	19.92	6.67	0.00**	73.41
	[4.20]	[1.98]	[1.00]	[5.20]	[6.58]	[3.89]	[0.00]	[6.43]
Total	5.21*	2.4	5.62***	86.77***	8.82*	3.07	11.93***	76.18***
	[1.37]	[0.59]	[1.01]	[1.84]	[1.65]	[0.69]	[1.96]	[2.58]

#### Table 7.25: How garbage is disposed (%)

		P135-II co	mmunes		n	on-P135-II	commune	s
	Col- lected	Dumped in rever/ lake	Dumped in a site nearby	Other	Col- lected	Dumped in rever/ lake	Dumped in a site nearby	Other
	-	-	Ethnicity			-	-	
Kinh and Hoa	0	0.03	0.74**	0.23**	0	0.03	0.65**	0.32**
	[0.00]	[0.01]	[0.02]	[0.02]	[0.00]	[0.01]	[0.03]	[0.03]
non-Kinh and non-Hoa	0.01	0.04	0.65***	0.29***	0.01	0.05	0.47***	0.47***
	[0.01]	[0.01]	[0.04]	[0.04]	[0.01]	[0.01]	[0.05]	[0.06]
		Da	aily langua	ges				
Absolutely no or little	0	0.04	0.75*	0.21*	0	0.04	0.66*	0.29*
Vietnamese	[0.00]	[0.01]	[0.02]	[0.02]	[0.00]	[0.01]	[0.04]	[0.04]
Mixed between Vietnam-	0	0.01	0.7	0.28	0	0.02	0.62	0.35
ese and ethnic languages	[0.00]	[0.01]	[0.04]	[0.04]	[0.00]	[0.01]	[0.05]	[0.05]
Absolutely no or little	0	0.01	0.71	0.28	0	0.01	0.63	0.36
ethnic languages	[0.00]	[0.01]	[0.07]	[0.07]	[0.00]	[0.01]	[0.04]	[0.04]
		Gender	of househ	old head				
Male	0	0.04	0.71***	0.25***	0	0.04	0.60***	0.36***
	[0.00]	[0.01]	[0.02]	[0.02]	[0.00]	[0.01]	[0.03]	[0.03]
Female	0.02	0.02	0.71*	0.25**	0.01	0.02	0.59*	0.39**
	[0.01]	[0.01]	[0.03]	[0.04]	[0.01]	[0.01]	[0.05]	[0.05]
		Geogra	aphy of co	mmunes				
Coastal or delta	0.02*	0.08	0.84	0.06	0.00*	0.1	0.82	0.08
	[0.01]	[0.02]	[0.03]	[0.02]	[0.00]	[0.04]	[0.06]	[0.03]
Others	0	0.02	0.67***	0.31***	0	0.03	0.55***	0.42***
	[0.00]	[0.00]	[0.02]	[0.02]	[0.00]	[0.01]	[0.03]	[0.03]
			Regions					
North	0	0.02	0.76***	0.22***	0.01	0.02	0.60***	0.38***
	[0.00]	[0.00]	[0.02]	[0.02]	[0.00]	[0.00]	[0.03]	[0.03]
Centre	0.00*	0.03**	0.51*	0.46	0.00*	0.07**	0.36*	0.57
	[0.00]	[0.01]	[0.05]	[0.05]	[0.00]	[0.02]	[0.06]	[0.05]
South	0.01*	0.06	0.77	0.15	0.00*	0.09	0.8	0.11
	[0.01]	[0.02]	[0.03]	[0.04]	[0.00]	[0.04]	[0.06]	[0.03]
Total	0	0.03	0.71***	0.25***	0	0.04	0.60***	0.36***
	[0.00]	[0.01]	[0.02]	[0.02]	[0.00]	[0.01]	[0.03]	[0.03]

## Table 7.26: Pay for disposing garbage (%)

	P135-II com-		non-P135-II	
	Pay for garbage	Amount naid	Pay for garbage	Amount naid
	collection		collection	Amount pulu
	Ethnic	ity		
Kinh and Hoa	0	0	0	0
	[0.00]	[0.00]	[0.00]	[0.00]
non-Kinh and non-Hoa	1.13	2.71	0.52	0.29
	[0.72]	[2.39]	[0.38]	[0.29]
	Daily lang	uages		
Absolutely no or little Vietnamese	0	0	0	0
	[0.00]	[0.00]	[0.00]	[0.00]
Mixed between Vietnamese and	0	0	0	0
ethnic languages	[0.00]	[0.00]	[0.00]	[0.00]
Absolutely no or little ethnic	0	0	0	0
languages	[0.00]	[0.00]	[0.00]	[0.00]
	Gender of hous	sehold head		
Male	0.12	0.01	0.18	0.1
	[0.12]	[0.01]	[0.13]	[0.10]
Female	1.96	6.42	0	0
	[1.48]	[5.27]	[0.00]	[0.00]
	Geography of	communes		
Coastal or delta	1.54	3.83	0	0
	[0.99]	[3.45]	[0.00]	[0.00]
Others	0.06	0.11	0.18	0.1
	[0.06]	[0.11]	[0.13]	[0.10]
	Regio	ns		
North	0	0	0.23	0.13
	[0.00]	[0.00]	[0.17]	[0.13]
Centre	0.2	0.37	0	0
	[0.20]	[0.36]	[0.00]	[0.00]
South	1.16	2.9	0	0
	[0.78]	[2.66]	[0.00]	[0.00]
Total	0.38	0.9	0.15	0.08
	[0.24]	[0.79]	[0.11]	[0.08]

	% of house-	If yes, %		P13	5-II commune	s		-uou	135-Il commu	nes
	holds that is a farming household or a farmer association member or an exten- sion partici- pator	of 135 group	% Ag- ricutural extension center providing house- holds with training	% House- hold coming to Agricutural extension center to have training on agricultural techniques	% house- hlds having Agri exten- sion staff coming to their home to provide training	% of house- holds that is a farming household or a farmer association member or an exten- sion partici- pator	If yes, % of 135 group	% Ag- ricutural extension center providing house- holds with train- ing	% House- hold coming to Agricutural extension center to have training on agricultural techniques	% house- hlds hav- ing Agri exten- sion staff coming to their home to provide training
				Ethnicity						
Kinh and Hoa	25.73	21.03***	57.86*	23.25	5.54	28.82	7.70***	49.14*	21.68	4.21
	[2.33]	[3.57]	[3.35]	[1.92]	[0.76]	[3.25]	[1.59]	[3.75]	[2.77]	[0.98]
non-Kinh and non-Hoa	18.84	10.95	52.56*	14.46	4.90**	26.34	6.66	36.78*	13.63	2.08**
	[3.14]	[3.61]	[5.22]	[2.54]	[1.08]	[4.10]	[2.87]	[7.68]	[2.54]	[0.69]
			Da	ily languages						
Absolutely no or little Vietnamese	24.67	22.92***	54.91*	21.53	6.45	28.92	5.30***	43.74*	20.23	5.01
	[2.49]	[4.12]	[3.92]	[2.05]	[0.92]	[4.01]	[1.57]	[4.73]	[3.19]	[1.23]
Mixed between Vietnamese and ethnic	28.51	17.89	69.52	29.78	3.62	24.7	12.26	62.43	27.35	3.7
languages	[3.72]	[5.05]	[4.67]	[3.61]	[1.10]	[4.25]	[4.26]	[5.79]	[4.83]	[1.63]
Absolutely no or little ethnic languages	27.7	14.18	47.96	19.68	3.39	35.47	10.07	53.63	17.56	1.89
	[6.94]	[7.36]	[9.84]	[4.20]	[1.38]	[5.00]	[3.21]	[6.10]	[3.78]	[0.95]
			Gender	of household	head					
Male	24.58	18.91***	57.66**	22.09	5.88*	29.23	7.61***	48.00**	20.74	3.82*
	[2.06]	[3,10]	[2.96]	[1.72]	[0.70]	[2.82]	[1.50]	[3.69]	[2.34]	[0.80]

Table 7.27: Using agricultural extension services
Female	16.35	12.87	45.18*	9.39	1.96	21.51	5.87	28.09*	11.14	2.23
	[3.09]	[4.09]	[7.15]	[1.97]	[0.71]	[3.79]	[2.65]	[6.19]	[2.83]	[0.86]
			Geogra	phy of comm	unes					
Coastal or delta	2.65	51.41	70.81	5.41	3.54	5.46	0.00***	54.82	1.81	3.83
	[1.33]	[6.19]	[17.44]	[1.98]	[1.30]	[4.06]	[00:0]	[19.48]	[1.26]	[2.74]
Others	28.58	18.02***	56.05**	24.22	5.81**	31.48	7.89***	45.70**	22.15	3.52**
	[2.00]	[3.03]	[3.09]	[1.63]	[0.73]	[2.81]	[1.54]	[3.83]	[2.25]	[0.78]
				Regions						
North	32.31	13.85*	53.37*	24.28	5.67***	32.71	7.89*	42.79*	21.27	2.89***
	[2.63]	[2.72]	[3.47]	[1.94]	[0.85]	[3.40]	[1.81]	[4.17]	[2.49]	[0.65]
Centre	26.67	25.96**	61.47	23.69	2.44	27.97	8.11**	57.24	25.12	4.5
	[3.21]	[7.41]	[6.08]	[3.63]	[0.72]	[4.73]	[2.62]	[8.28]	[5:53]	[2.60]
South	4.37	44.03	68.09	10.34**	7.14	5.93	0.00***	61.22	3.63**	5.45
	[1.32]	[10.17]	[12.27]	[2.49]	[1.77]	[3.70]	[00:0]	[13.04]	[2.08]	[2.85]
Total	23.43	18.32***	56.44**	20.31	5.33*	28.09	7.42***	45.76**	19.33	3.59*
	[2.09]	[2.90]	[2.95]	[1.67]	[0.65]	[2.74]	[1.47]	[3.64]	[2.18]	[0.75]

		P135-II	communes			non-P135-II	communes	
	% of house-	% Not happy with the quality	% Not happy with the quality of the	% Happy with the	% of house- hold paving	% Not happy with the	% Not happy with the	% Happy with the
	hold paying	of the informa- tion	information	quality of the infor-		quality of the information	quality of the information	quality of the informa-
	-			mation				tion
			Ethnicity					
Kinh and Hoa	1.69	0.47	11.48	88.05	0.59	0.34	9.47	90.19
	[0.75]	[0.24]	[1.99]	[2.01]	[0.34]	[0.25]	[2.50]	[2.50]
non-Kinh and non-Hoa	0	1.4	3.41***	95.19***	0	3.54	21.65***	74.81***
	[0.00]	[1.05]	[1.92]	[2.20]	[00.00]	[3.57]	[6.57]	[6.93]
			Daily languages					
Absolutely no or little Vietnamese	1.51	0.72	13.66	85.62	0.78	0.39	13.95	85.66
	[06:0]	[0.37]	[2.39]	[2.43]	[0.55]	[0.39]	[3.84]	[3.81]
Mixed between Vietnamese and ethnic	2.34	0	7.84*	92.16	0.47	0.37	2.81*	96.82
languages	[1.57]	[00:0]	[2.33]	[2.33]	[0.47]	[0.37]	[1.59]	[1.63]
Absolutely no or little ethnic languages	0	0	3.87	96.13	0	0	7.07	92.93
	[00.0]	[00:0]	[4.04]	[4.04]	[00.0]	[00:0]	[4.73]	[4.73]
		G	ender of household	head				
Male	1.41	0.52	10.01	89.47	0.53	0.99	11.29	87.72
	[0.64]	[0.27]	[1.80]	[1.81]	[0.31]	[0.72]	[2.48]	[2.54]
Female	0	2.48	6.12	91.4	0	0	14.55	85.45
	[00.0]	[1.99]	[2.95]	[3.53]	[00.0]	[00:0]	[9.98]	[9.98]
		J	Geography of commu	ines				
Coastal or delta	0	0	0	100	0	0	0	100
	[00.0]	[0.00]	[0.00]	[00.0]	[0.00]	[0.00]	[0.00]	[00.00]

Table 7.28: Paying for extension service: on the use of fertilizer

Others	1.37	0.7	10.11	89.19	0.51	0.95	12.26	86.8
	[0.62]	[0.31]	[1.75]	[1.78]	[0:30]	[0.69]	[2.58]	[2.63]
			Regions					
North	1.27	0.73	11.66	87.61	0.3	1.27	13.72	85.02
	[0.76]	[0.42]	[2.35]	[2.38]	[0.29]	[0.93]	[3.11]	[3.18]
Centre	2.22	0.76	10.71	88.54	1.24	0	8.7	91.3
	[1.50]	[0.55]	[3.34]	[3.33]	[0.87]	[0.00]	[4.75]	[4.75]
South	0	0.37	0	99.63	0	0	0	100
	[00.0]	[0.40]	[00.0]	[0.40]	[00.0]	[0.00]	[0.00]	[0.00]
Total	1.3	0.68	9.71	89.62	0.48	0.9	11.59	87.51
	[0.59]	[0.30]	[1.69]	[1.71]	[0.28]	[0.65]	[2.47]	[2.52]

	P1	35-II con	nmunes		no	n-P135-II c	ommun	es
	Effects on o decisio	copping ons	Effec livesto sic	cts on ck deci- ons	Effects ping de	on cop- ecisions	Effect livesto sic	cts on ck deci- ons
	% having no or little effects	% hav- ing ef- fects	% hav- ing no or little ef- fects	% having effects	% hav- ing no or little effects	% hav- ing effects	% hav- ing no or little ef- fects	% having effects
	-	Et	thnicity	-	-	-	-	
Kinh and Hoa	30.41	69.59	NA	NA	25.97	74.03	NA	NA
	[2.81]	[2.81]			[3.58]	[3.58]		
non-Kinh and non-Hoa	33.12	66.88	NA	NA	23.05	76.95	NA	NA
	[7.38]	[7.38]			[7.05]	[7.05]		
		Daily	languag	es			_	
Absolutely no or little Viet-	29.42	70.58	NA	NA	26.63	73.37	NA	NA
namese	[3.23]	[3.23]			[5.14]	[5.14]		
Mixed between Vietnamese	31.79	68.21	NA	NA	27.38	72.62	NA	NA
and ethnic languages	[4.97]	[4.97]			[5.07]	[5.07]		
Absolutely no or little ethnic	40.82	59.18	NA	NA	18.46	81.54	NA	NA
languages	[9.50]	[9.50]			[11.05]	[11.05]		
	Ge	ender of	househo	ld head				
Male	30.73	69.27	NA	NA	24.93	75.07	NA	NA
	[2.76]	[2.76]			[3.22]	[3.22]		
Female	34.08	65.92	NA	NA	30.77	69.23	NA	NA
	[7.09]	[7.09]			[10.35]	[10.35]		
	G	eograph	y of com	munes				
Coastal or delta	85.83	14.17	NA	NA	50	50	NA	NA
	[15.28]	[15.28]			[0.00]	[0.00]		
Others	30.52	69.48	NA	NA	25.63	74.37	NA	NA
	[2.82]	[2.82]			[3.26]	[3.26]		
		R	egions					
North	25.67	74.33	NA	NA	24.68	75.32	NA	NA
	[3.21]	[3.21]			[3.94]	[3.94]		
Centre	32.39	67.61	NA	NA	25.58	74.42	NA	NA
	[5.32]	[5.32]			[5.46]	[5.46]		
South	58.58	41.42	NA	NA	55.37	44.63	NA	NA
	[6.10]	[6.10]			[4.66]	[4.66]		
Total	31	69	NA	NA	25.47	74.53	NA	NA
	[2.76]	[2.76]			[3.19]	[3.19]		

#### Table 7.29: Usefulness of extension service: on the use of fertilizer

## Table 7.30: Paying for extension service: on the use of irrigation

		P135-II	communes			non-P135-	II commun	es
	% of house- hold paying	% Not happy with the quality of the infor- mation	% Not happy with the quality of the infor- mation	% Happy with the quality of the infor- mation	% of house- hold paying	% Not happy with the quality of the informa- tion	% Not happy with the quality of the informa- tion	% Happy with the qual- ity of the informa- tion
			Ethnici	ty				
Kinh and Hoa	NA	0	15.12	84.88	NA	0.58	12.14	87.28
		[0.00]	[3.56]	[3.56]		[0.59]	[3.75]	[3.77]
non-Kinh and non-Hoa	NA	2.41	6.22	91.37	NA	0	5.68	94.32
		[2.39]	[4.10]	[4.65]		[0.00]	[5.40]	[5.40]
			Daily langu	lages				
Absolutely no or little	NA	0	24.44	75.56	NA	0	18.15	81.85
Vietnamese		[0.00]	[5.33]	[5.33]		[0.00]	[6.99]	[6.99]
Mixed between Vietnam-	NA	0	5.1	94.9	NA	1.55	2.91	95.54
ese and ethnic languages		[0.00]	[2.37]	[2.37]		[1.62]	[2.62]	[2.93]
Absolutely no or little	NA	0	0.00*	100.00*	NA	0	15.97*	84.03
ethnic languages		[0.00]	[0.00]	[0.00]		[0.00]	[8.17]	[8.17]
		Ger	nder of house	ehold head				
Male	NA	0.66	13.28	86.06	NA	0.53	9.63	89.84
		[0.66]	[2.98]	[3.00]		[0.54]	[2.99]	[3.02]
Female	NA	0	7.95	92.05	NA	0	26.14	73.86
		[0.00]	[6.34]	[6.34]		[0.00]	[21.31]	[21.31]
		Ge	ography of c	ommunes	_			
Coastal or delta	NA	NA	NA	NA	NA	NA	NA	NA
Others	NA	0.64	13.4	85.96	NA	0.49	11.31	88.19
		[0.63]	[2.93]	[2.95]		[0.50]	[3.45]	[3.46]
			Region	s				
North	NA	0.95	15.38	83.68	NA	0.62	14.22	85.16
		[0.94]	[4.08]	[4.12]		[0.63]	[4.21]	[4.23]
Centre	NA	0	12.23***	87.77***	NA	0	0.00***	100.00***
		[0.00]	[4.33]	[4.33]		[0.00]	[0.00]	[0.00]
South	NA	0	0	100	NA	0	0	100
		[0.00]	[0.00]	[0.00]		[0.00]	[0.00]	[0.00]
Total	NA	0.61	12.86	86.53	NA	0.48	11.03	88.48
		[0.61]	[2.82]	[2.84]		[0.49]	[3.38]	[3.39]

# Table 7.31: Usefulness of extension service: on the use of irrigation

	F	P135-II con	nmunes		no	n-P135-ll o	communes	
	Effects on decision	copping ons	Effects of stock dee	on live- cisions	Effects on decis	copping ions	Effects o stock dee	on live- cisions
	% having no or little effects	% having effects	% having no or little ef- fects	% having effects	% having no or little ef- fects	% having effects	% hav- ing no or little effects	% hav- ing ef- fects
	I	I	Ethnicity		I		L	
Kinh and Hoa	35.64	64.36	NA	NA	28.82	71.18	NA	NA
	[5.46]	[5.46]			[5.67]	[5.67]		
non-Kinh and non-Hoa	42.75	57.25	NA	NA	31.12	68.88	NA	NA
	[10.25]	[10.25]			[11.18]	[11.18]		
	-	D	aily langua	ges	-	-		
Absolutely no or little	27.86	72.14	NA	NA	22.59	77.41	NA	NA
Vietnamese	[4.70]	[4.70]			[7.88]	[7.88]		
Mixed between Viet-	38.23	61.77	NA	NA	42.33	57.67	NA	NA
namese and ethnic languages	[9.35]	[9.35]			[9.29]	[9.29]		
Absolutely no or little	77.06***	22.94***	NA	NA	14.60***	85.40***	NA	NA
ethnic languages	[14.72]	[14.72]			[7.62]	[7.62]		
		Gender	of househ	old head				
Male	39.39	60.61	NA	NA	27.72	72.28	NA	NA
	[5.52]	[5.52]			[5.04]	[5.04]		
Female	14.51	85.49	NA	NA	45.3	54.7	NA	NA
	[7.60]	[7.60]			[19.36]	[19.36]		
		Geogr	aphy of con	nmunes				
Coastal or delta	NA	NA	NA	NA	NA	NA	NA	NA
Others	38.06	61.94	NA	NA	29.95	70.05	NA	NA
	[5.34]	[5.34]			[5.22]	[5.22]		
			Regions	<b></b>			I	
North	34.93	65.07	NA	NA	30.52	69.48	NA	NA
	[6.66]	[6.66]			[5.96]	[5.96]		
Centre	49.7	50.3	NA	NA	30.06	69.94	NA	NA
	[8.37]	[8.37]			[11.94]	[11.94]		
South	32.33	67.67	NA	NA	0	100	NA	NA
	[23.48]	[23.48]			[0.00]	[0.00]		
Total	37.45	62.55	NA	NA	29.21	70.79	NA	NA
	[5.18]	[5.18]			[5.11]	[5.11]		

		D135-II oc	mmines			non-D135-II	Commines	
	% of house-	% Not happy	% Not happy	% Happy	% of house-	% Not happy	% Not happy	% Happy
	noid paying	with the	with the	with the	noid paying	with the	with the	with the
		quality of the informa-	quality of the informa-	quality of the informa-		quality of the informa-	quality of the informa-	quality of the informa-
		tion	tion	tion		tion	tion	tion
			Ethnicity					
Kinh and Hoa	0.46	0.78**	13.83	85.39	0.86	0.12**	10.1	89.78
	[0.22]	[0.31]	[1.83]	[1.85]	[0.43]	[0.12]	[2.22]	[2.21]
non-Kinh and non-Hoa	0.37	0.53	3.82	95.66	0	1.86	7.33	90.81
	[0.39]	[0.53]	[1.12]	[1.19]	[0.00]	[1.89]	[2.67]	[3.25]
		Da	aily languages					
Absolutely no or little Vietnamese	0.37	0.99	18.08	80.93*	1.07	0.21	12.05	87.74*
	[0.26]	[0.42]	[2.36]	[2.39]	[0.62]	[0.21]	[3.03]	[3.01]
Mixed between Vietnamese and ethnic lan-	0.98*	0.54	7.74	91.72	0.00*	0	9.82	90.18
guages	[0.51]	[0.40]	[2.61]	[2.61]	[0.00]	[0.00]	[3.64]	[3.64]
Absolutely no or little ethnic languages	0	0	5.1	94.9	2.26	0	5.29	94.71
	[00:0]	[00.0]	[4.03]	[4.03]	[2.12]	[0.00]	[2.66]	[2.66]
		Gender	of household	head				
Male	0.47	0.78	12.21	87.01	0.66	0.45	9.36	90.19
	[0.21]	[0.29]	[1.64]	[1.66]	[0.34]	[0.36]	[1.92]	[1.94]
Female	0	0	6.45	93.55	1.31	0	12.62	87.38
	[00.0]	[00.00]	[2.42]	[2.42]	[1.30]	[0.00]	[6.56]	[6.56]
		Geogra	aphy of commu	ines				
Coastal or delta	0	0	0	100	0	0	0	100
	[00:0]	[00.0]	[00:0]	[00:0]	[00.00]	[0.00]	[0.00]	[0.00]
Others	0.46	0.76	12.23	87.01	0.6	0.43	10.04	89.53
	[0.20]	[0.28]	[1.60]	[1.62]	[0.35]	[0.35]	[1.96]	[1.97]

Table 7.32: Paying for extension service: on the use of seeds

			Regions					
North	0.31	1.09	13.4	85.51	0.6	0.55	12.09	87.36
	[0.20]	[0.42]	[1.97]	[2.01]	[0.42]	[0.44]	[2.40]	[2.42]
Centre	0.91	0.15	12.38***	87.48***	0.65	0	1.81***	98.19***
	[0.52]	[0.15]	[3.23]	[3.23]	[0.68]	[00.0]	[1.11]	[1.11]
South	0	0	0	100	0	0	7.81	92.19
	[00.0]	[00:0]	[00.0]	[0.00]	[00.00]	[00.0]	[5.02]	[5.02]
Total	0.44	0.73	11.78	87.5	0.72	0.41	9.63	89.95
	[0.19]	[0.27]	[1.55]	[1.56]	[0.36]	[0.33]	[1.89]	[1.91]

		P135-II co	ommunes			non-P135-II	communes	
	Effects on co	opping deci-	Effects on liv	estock deci-	Effects on co	pping deci-	Effects on liv	estock deci-
	sio	su	sio	ns	sio	ls S	sio	ns
	% having	% having	% having	% having	% having	% having	% having	% having
	no or little effects	effects	no or little effects	effects	no or little effects	effects	no or little effects	effects
			Ethnicity					
Kinh and Hoa	31.58	68.42	34.59	65.41	27.63	72.37	28.74	71.26
	[2.30]	[2.30]	[2.53]	[2.53]	[2.86]	[2.86]	[3.69]	[3.69]
non-Kinh and non-Hoa	29.92	70.08	33.51	66.49	27.8	72.2	32.59	67.41
	[4.99]	[4.99]	[6.70]	[6.70]	[6.35]	[6.35]	[7.42]	[7.42]
			Daily language:					
Absolutely no or little Vietnamese	32.38*	67.62*	35.18	64.82	24.84*	75.16*	30.1	69.9
	[3.01]	[3.01]	[2.99]	[2.99]	[2.81]	[2.81]	[4.10]	[4.10]
Mixed between Vietnamese and ethnic	29.73	70.27	33.47	66.53	34.11	65.89	31.32	68.68
languages	[3.98]	[3.98]	[4.48]	[4.48]	[6.01]	[6.01]	[6.95]	[6.95]
Absolutely no or little ethnic languages	34.4	65.6	35.15*	64.85*	21.22	78.78	16.22*	83.78*
	[8.31]	[8.31]	[8.82]	[8.82]	[6.71]	[6.71]	[4.84]	[4.84]
		Gend	er of household	l head				
Male	31.41	68.59	33.92	66.08	26.9	73.1	28.92	71.08
	[2.15]	[2.15]	[2.40]	[2.40]	[2.62]	[2.62]	[3.34]	[3.34]
Female	29.05	70.95	40.73	59.27	36.04	63.96	35.89	64.11
	[5.62]	[5.62]	[7.34]	[7.34]	[7.58]	[7.58]	[10.84]	[10.84]
		Geoć	graphy of comm	nnes				
Coastal or delta	54.97*	45.03*	31.41	68.59	100.00*	0.00*	100	0
	[21.24]	[21.24]	[43.09]	[43.09]	[0.00]	[00.0]	[0.00]	[0.00]
Others	31.4	68.6	34.94	65.06	27.36	72.64	29.51	70.49
	[2.15]	[2.15]	[2.44]	[2.44]	[2.58]	[2.58]	[3.32]	[3.32]

Table 7.33: Usefulness of extension service: on the use of seeds

North Centre South Total
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## Table 7.34: Paying for extension service: on the use of market information

		P135-II co	mmunes		n	on-P135-II	commune	s
	% of	% Not	% Not	%	% of	% Not	% Not	%
	house-	happy	happy	Нарру	house-	happy	happy	Нарру
	hold	with the	with the	with	hold	with the	with	with
	paying	of the	of the	quality	paying	ity of the	quality	une quality
		informa-	infor-	of the		informa-	of the	of the
		tion	mation	infor-		tion	infor-	infor-
				mation			mation	mation
			Ethnicity					
Kinh and Hoa	0	0	10.65	89.35	0	0	8.13	91.87
	[0.00]	[0.00]	[4.10]	[4.10]	[0.00]	[0.00]	[5.69]	[5.69]
non-Kinh and non-Hoa	0	0	1.11	98.89	0	0	0	100
	[0.00]	[0.00]	[1.19]	[1.19]	[0.00]	[0.00]	[0.00]	[0.00]
		Da	ily langua	ges				
Absolutely no or little Viet-	0	0	18.52	81.48	0	0	14.2	85.8
namese	[0.00]	[0.00]	[7.10]	[7.10]	[0.00]	[0.00]	[9.64]	[9.64]
Mixed between Vietnamese	0	0	3.26	96.74	0	0	0	100
and ethnic languages	[0.00]	[0.00]	[3.41]	[3.41]	[0.00]	[0.00]	[0.00]	[0.00]
Absolutely no or little ethnic	0	0	0	100	0	0	0	100
languages	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]
		Gender	of househ	old head				
Male	0	0	7.21	92.79	0	0	7.34	92.66
	[0.00]	[0.00]	[2.90]	[2.90]	[0.00]	[0.00]	[5.16]	[5.16]
Female	0	0	11.17	88.83	0	0	0	100
	[0.00]	[0.00]	[10.97]	[10.97]	[0.00]	[0.00]	[0.00]	[0.00]
		Geogra	phy of cor	nmunes	_			
Coastal or delta	NA	NA	NA	NA	NA	NA	NA	NA
Others	0	0	7.67	92.33	0	0	7.05	92.95
	[0.00]	[0.00]	[2.97]	[2.97]	[0.00]	[0.00]	[4.98]	[4.98]
			Regions	-	_		_	
North	0	0	13.9	86.1	0	0	8.15	91.85
	[0.00]	[0.00]	[5.17]	[5.17]	[0.00]	[0.00]	[5.71]	[5.71]
Centre	0	0	0	100	0	0	0	100
	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]
South	0	0	0	100	0	0	0	100
	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]
Total	0	0	7.35	92.65	0	0	7.05	92.95
	[0.00]	[0.00]	[2.83]	[2.83]	[0.00]	[0.00]	[4.98]	[4.98]

#### Table 7.35: Usefulness of extension service: on the use of market information

		P135-II c	ommunes		n	on-P135	-II commur	nes
	Effects of ping dec	on cop- cisions	Effects of stock dee	on live- cisions	Effec coppin sic	ts on g deci- ons	Effects stock de	on live- ecisions
	% hav- ing no or little effects	% having effects	% having no or little ef- fects	% having effects	% hav- ing no or little ef- fects	% hav- ing ef- fects	% hav- ing no or little effects	% having effects
	•		Ethnicity					
Kinh and Hoa	NA	NA	50.77	49.23	NA	NA	30	70
			[10.07]	[10.07]			[11.73]	[11.73]
non-Kinh and non-Hoa	NA	NA	39.54	60.46	NA	NA	27.94	72.06
			[14.15]	[14.15]			[20.90]	[20.90]
		Da	aily langua	ges				
Absolutely no or little	NA	NA	42.04*	57.96*	NA	NA	12.81*	87.19*
Vietnamese			[12.79]	[12.79]			[9.28]	[9.28]
Mixed between Vietnam-	NA	NA	47.61**	52.39**	NA	NA	94.76**	5.24**
ese and ethnic languages			[16.75]	[16.75]			[6.31]	[6.31]
Absolutely no or little	NA	NA	100.00***	0.00***	NA	NA	6.72	93.28***
ethnic languages			[0.00]	[0.00]			[8.16]	[8.16]
		Gender	of househ	old head				
Male	NA	NA	45.4	54.6	NA	NA	28.61	71.39
			[9.29]	[9.29]			[10.21]	[10.21]
Female	NA	NA	NA	NA	NA	NA	NA	NA
		Geogra	aphy of con	nmunes				
Coastal or delta	NA	NA	NA	NA	NA	NA	NA	NA
Others	NA	NA	46.05	53.95	NA	NA	29.74	70.26
			[9.27]	[9.27]			[10.50]	[10.50]
			Regions					
North	NA	NA	52.5	47.5	NA	NA	28	72
			[10.13]	[10.13]			[10.82]	[10.82]
Centre	NA	NA	75.67	24.33	NA	NA	75.09	24.91
			[10.46]	[10.46]			[25.00]	[25.00]
South	NA	NA	NA	NA	NA	NA	NA	NA
Total	NA	NA	47.14	52.86	NA	NA	29.74	70.26
			[9.06]	[9.06]			[10.50]	[10.50]

## Table 7.36: Paying for extension service: on the use of access to credti

	P135-II communes				non-P135-II communes					
	% of house- hold	% Not happy with the	% Not happy with the	% Happy with	% of house- hold	% Not happy with the	% Not happy with the	% Happy with		
	paying	quality of the infor- mation	quality of the informa- tion	the quality of the infor- mation	paying	quality of the informa- tion	quality of the infor- mation	the quality of the infor- mation		
Ethnicity										
Kinh and Hoa	0	0.81	8.27	90.92	0	0	7.67	92.33		
	[0.00]	[0.81]	[3.35]	[3.39]	[0.00]	[0.00]	[3.84]	[3.84]		
non-Kinh and non-Hoa	0	0	0	100.00*	0	25.2	14.53	60.27*		
	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]	[21.35]	[10.13]	[19.71]		
Daily languages										
Absolutely no or little Viet-	0	0	13.88	86.12	0	0	12.84	87.16		
namese	[0.00]	[0.00]	[5.01]	[5.01]	[0.00]	[0.00]	[7.67]	[7.67]		
Mixed between Vietnamese	0	2.53	0	97.47	0	0	5.43	94.57		
and ethnic languages	[0.00]	[2.48]	[0.00]	[2.48]	[0.00]	[0.00]	[5.31]	[5.31]		
Absolutely no or little ethnic	0	0	0	100	0	0	13.09	86.91		
languages	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]	[13.34]	[13.34]		
		Gender	of househ	old head	-	-				
Male	0	0.73	7.52	91.75	0	6.14	9.76	84.09		
	[0.00]	[0.74]	[3.04]	[3.08]	[0.00]	[5.97]	[3.94]	[6.73]		
Female	0	0	0	100	0	0	0	100		
	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]		
Geography of communes										
Coastal or delta	NA	NA	NA	NA	NA	NA	NA	NA		
Others	0	0	7.82	92.18	0	6.2	9.85	83.95		
	[0.00]	[0.00]	[3.15]	[3.15]	[0.00]	[6.03]	[4.01]	[6.83]		
Regions										
North	0	0	8.54	91.46	0	0	9.29	90.71		
	[0.00]	[0.00]	[3.43]	[3.43]	[0.00]	[0.00]	[4.24]	[4.24]		
Centre	0	0	0	100	0	53.09	0	46.91		
	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]	[33.52]	[0.00]	[33.52]		
South	0	0	0	100	0	0	50	50		
	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]		
Total	0	0.7	7.19	92.11	0	5.82	9.25	84.92		
	[0.00]	[0.70]	[2.93]	[2.96]	[0.00]	[5.69]	[3.79]	[6.48]		

#### Table 7.37: Usefulness of extension service: on the use of access to credti

	P135-II communes				non-P135-II communes					
	Effects on copping decisions		Effects on live- stock decisions		Effects on copping decisions		Effects on live- stock decisions			
	% having no or little effects	% having effects	% hav- ing no or little effects	% having effects	% hav- ing no or little effects	% hav- ing effects	% hav- ing no or little effects	% having effects		
Ethnicity										
Kinh and Hoa	46.64	53.36	49.91	50.09	43.19	56.81	45.55	54.45		
	[5.98]	[5.98]	[5.95]	[5.95]	[8.74]	[8.74]	[8.64]	[8.64]		
non-Kinh and non-Hoa	63.29	36.71	63.29*	36.71*	28.64	71.36	23.89*	76.11*		
	[17.21]	[17.21]	[17.21]	[17.21]	[14.97]	[14.97]	[12.86]	[12.86]		
Daily languages										
Absolutely no or little Vietnamese	48.01	51.99	54.83	45.17	34.05	65.95	43.21	56.79		
	[7.70]	[7.70]	[7.36]	[7.36]	[8.41]	[8.41]	[8.99]	[8.99]		
Mixed between Vietnam- ese and ethnic languages	37.12	62.88	35.34	64.66	60.6	39.4	54.05	45.95		
	[10.56]	[10.56]	[9.81]	[9.81]	[15.66]	[15.66]	[15.38]	[15.38]		
Absolutely no or little ethnic languages	72.39**	27.61**	72.39*	27.61*	18.27**	81.73**	26.23*	73.77*		
	[15.99]	[15.99]	[15.99]	[15.99]	[13.49]	[13.49]	[14.33]	[14.33]		
Gender of household head										
Male	49.02	50.98	51.52	48.48	39.61	60.39	39.73	60.27		
	[6.27]	[6.27]	[6.18]	[6.18]	[8.07]	[8.07]	[7.97]	[7.97]		
Female	44.82	55.18	54.89	45.11	55.6	44.4	55.6	44.4		
	[23.03]	[23.03]	[26.84]	[26.84]	[32.95]	[32.95]	[32.95]	[32.95]		
Geography of communes										
Coastal or delta	NA	NA	NA	NA	NA	NA	NA	NA		
Others	50.57	49.43	53.17	46.83	43.3	56.7	43.16	56.84		
	[6.21]	[6.21]	[6.14]	[6.14]	[8.29]	[8.29]	[8.18]	[8.18]		
Regions										
North	49.18	50.82	52.05	47.95	42.35	57.65	42.49	57.51		
	[6.62]	[6.62]	[6.54]	[6.54]	[9.06]	[9.06]	[8.93]	[8.93]		
Centre	74.97	25.03	74.97	25.03	55.54	44.46	46.91	53.09		
	[17.63]	[17.63]	[17.63]	[17.63]	[33.25]	[33.25]	[33.52]	[33.52]		
South	68.87	31.13	68.87	31.13	45.96	54.04	45.96	54.04		
	[42.88]	[42.88]	[42.88]	[42.88]	[7.44]	[7.44]	[7.44]	[7.44]		
Iotal	48.83	51.17	51.65	48.35	40.5	59.5	40.56	59.44		
	[6.13]	[6.13]	[6.04]	[6.04]	[8.16]	[8.16]	[8.04]	[8.04]		

### Table 7.38: Using legal services

	P135-II communes				non-P135-II communes				
	% of house- hold us- ing legal services	% Not happy	% Neu- tral	% Нарру	% of house- hold us- ing legal services	% Not happy	% Neu- tral	% Нарру	
Ethnicity									
Kinh and Hoa	20.99	3.12	5.84	91.04*	20.34	1.26	3.28	95.46*	
	[1.65]	[1.14]	[1.44]	[1.92]	[2.86]	[0.69]	[1.24]	[1.56]	
non-Kinh and non-Hoa	30.82	4.94	1.46	93.60*	26.74	12.18	5.24	82.57*	
	[3.20]	[2.48]	[0.70]	[2.60]	[3.33]	[4.79]	[2.24]	[5.20]	
Daily languages									
Absolutely no or little Viet- namese	19.34	2.26	5.8	91.93	20.88	1.44	4.28	94.28	
	[1.87]	[0.89]	[1.62]	[2.06]	[3.56]	[0.87]	[1.86]	[2.23]	
Mixed between Vietnamese	25.69**	4.2	6.81	88.99	16.60**	1.89	3.45	94.65	
and ethnic languages	[2.55]	[3.22]	[3.40]	[4.54]	[3.25]	[1.91]	[1.77]	[2.67]	
Absolutely no or little ethnic languages	22.17	6.31*	2.13	91.56*	25.11	0.00*	1.48	98.52*	
	[4.07]	[3.69]	[1.57]	[3.64]	[5.48]	[0.00]	[1.60]	[1.60]	
Gender of household head									
Male	24	4.32	4.24	91.45	21.76	4.57	3.59	91.84	
	[1.79]	[1.39]	[0.99]	[1.77]	[2.57]	[1.76]	[1.19]	[2.28]	
Female	25.94	1.07	3.2	95.73	24.76	6.47	5.81	87.72	
	[3.64]	[1.09]	[2.00]	[2.33]	[4.76]	[5.14]	[3.19]	[6.35]	
Geography of communes									
Coastal or delta	36.42	2.23	0	97.77	48.29	1.63	0	98.37	
	[6.37]	[2.29]	[0.00]	[2.29]	[6.79]	[1.72]	[0.00]	[1.72]	
Others	20.7	4.7	5.86	89.44	17.71	6.83	6.23	86.94	
	[1.11]	[1.48]	[1.27]	[1.99]	[1.66]	[2.75]	[1.47]	[2.95]	
Regions									
North	17.02	4.87	6.22	88.91	15.01	3.11	5.13	91.76	
	[1.16]	[1.85]	[1.72]	[2.50]	[1.86]	[2.14]	[1.68]	[2.84]	
Centre	26.95	6.12	7.44	86.44	27.65	14.51	8.74	76.76	
	[2.48]	[3.05]	[2.42]	[3.92]	[3.31]	[6.50]	[2.97]	[5.93]	
South	33.46	1.73	0	98.27	46.54	1.58	0	98.42	
	[5.03]	[1.74]	[0.00]	[1.74]	[6.39]	[1.64]	[0.00]	[1.64]	
Total	24.27	3.85	4.09	92.06	22.2	4.85	3.93	91.22	
	[1.85]	[1.23]	[0.95]	[1.64]	[2.36]	[1.94]	[1.15]	[2.38]	

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