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## Rural Poverty Monitoring Survey in Vietnam

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**RURAL POVERTY MONITORING SURVEY**  
**IN VIETNAM**

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## **INTRODUCTION**

Starting in the late 1970's and the early 1980's from numerous adjustments of policy towards liberalisation and marketization in a number of economic domains, Vietnam's economic reform has contributed to speeding up economic growth and creating a structural change in the state economic sector and in the private one, as well. This has given rise to changes in social value and structure, and finally to multiple reforms in the system of legislation, institution and administration. Those changes in policy have led and are leading to the change in Vietnam's pattern of socio-economic development. In the past decade, one has witnessed a shift from centrally planned economy to an economy operating according to the market mechanism, from an economy in which the state played a decisive role in nearly all economic activities to a mixed economy in which the state sector is being restructured and the private sector is encouraged to develop.

Despite of successes in economic growth and restructuring, poverty still remains one of the most actual problems in the present development process in Vietnam. A significant percentage of population is still low-income earners with purchasing power below the desired standard. They also lack capital for production. Underemployment is very serious in both urban and rural areas. The tendency of increased differentiation in income earnings coupled with the low access capacity of the poor to public services such as education and training, medical services are now rendering more tense still the social relations among the population. Poverty is more serious in rural areas where about 80% of Vietnamese are living.

For policy purposes the foremost issue is the poverty monitoring. There is a great demand of governmental authorities and non-governmental organisations for poverty measurement and assessment. Several living standards monitoring surveys with different methodologies have been conducted in Vietnam and they have been reaching different statements on poverty rate.

Initiated in the middle of 1996, the research project on "Rural Poverty Monitoring in Vietnam" has been working out a methodology of poverty monitoring in rural areas, which based on participatory principles.

This paper will present major research findings relating to the pilot poverty monitoring survey conducted by the project in the last year. The paper consists of three parts. The first part presents an overview on poverty monitoring surveys in Vietnam. The second part presents results of MIMAP's poverty survey at the commune level. The third part presents survey results at household level.

# 1. POVERTY MONITORING SURVEYS IN VIETNAM

## **1.1. Types of poverty monitoring surveys:**

Theoretically speaking, there are various types of surveys containing information on poverty. Each type has its advantages and disadvantages for poverty monitoring and assessment.

a/ By the *scope of the surveys* it could be divided onto case-study surveys and nation-wide census.

The national census or household survey is usually multi-topic to serve the forming of macro-policies, in particular for inventory purposes (such as population, housing, land, etc.). It can absorb much manpower and finance. It may have sparser frequency rate (2-5 years a time) and a relatively small number of samples. The living standard assessment system may include statistic indicators formed by complex formulas of calculation or those requiring synthesis from many questions and types of observation and measurement.

Case-study surveys are usually used in the research, baseline study, evaluation of development projects, and in particular, poverty monitoring.

b/ By the *objective of surveys* it could be divided onto single-topic and multi-topic surveys.

Multi-topic surveys often contain various information, such as income and expenditures of households and individuals, family structure, education, health, employment, income-generating activities, habitat, etc. The advantage of this type of surveys is that the different variables can be correlated.

A typical example of the multi-topic surveys is the World Bank's Living Standard Measurement Survey (LSMS). This very large household survey usually consists of three components: household, community and prices. The household survey component is the largest and most time-consuming of the three mentioned components. It is aimed to collect comprehensive information on household's and individual's income (formal and informal, primary and secondary), consumption of food, non-durable and durable goods, and services, quality of life. Questionnaires cover household composition, spending, savings, employment, income, private transfers, education, health, fertility, nutrition, etc.

The second component of the LSMS - community level survey - focus on conditions of rural communities which are relevant to all households in a given locale, especially access to community infrastructure and basic social services. The questionnaires of this survey is generally administered to the community leaders and staff of community facilities such as school and health clinics.

The third component of the LSMS - price survey - is designed to measure purchasing power. The questionnaire focuses on price of the most important purchases and sales by low-income households, including consumer prices from local markets for food and non-food items, prices of main products, services.

The LSMS generally uses a national, random sample. The survey budget decides mostly the size of samples. The first Vietnam LSMS in 1993 covering 4800 households cost USD2 million. The second Vietnam LSMS is conducted currently (1998) with a double number of household samples.

The turn-around time between sample/questionnaire design and analysis of results is long, approximately 1.5 - 2 years.

The LSMS is labour intensive. It involves the staff of national statistical office. However, the data analysis is done in WB's headquarters. Therefore, almost no national capacity building in data analysis and assessment has been occurred. Additionally, although efforts of some donor agencies to transfer data, software and hardware to national authorities, little of national staff use the LSMS data in their policy making process.

*c/ By the characteristics of information collected it could be divided onto qualitative and quantitative surveys.*

Quantitative methods of surveys are usually used by economics and statisticians. The quantitative approach has its roots in the exact scientific methods. Quantitative methods could be used for defining poverty in external terms, such as physical basic needs deprivation due to consumption shortfalls, and for describing the concepts in terms of their measurable and observable characteristics. In order to reach a representation, quantitative surveys should cover a enough large size of samples.

Qualitative methods used by anthropologists, sociologists and political scientists. They are based on interpretative understanding of social meaning. Qualitative approach actually contains some qualitative data, but much information collected by this type of survey cannot be translated into quantitative terms. Qualitative methods tend to use an interactive (internal/external) process to understand both the constituents and their sources of well-being, which precludes their definition by external agents. The qualitative surveys usually attempt to emphasize the viewpoint of observed. They have a strong participatory base.

Qualitative surveys often tend to focus on in-depth assessment of small sample sizes and therefore less costly and have faster turn-around times than large quantitative survey.

A poverty monitoring survey belong has narrow target of assessing poverty of each community in order to have specific treatment of poverty. By the purpose, it is a single-topic survey. By the scope, it is usually a case-study survey. And by characteristics of information it uses both quantitative and qualitative methods.

This survey type can be done in each community (village, district, region, etc.) according to some levels: community, household or individual. This survey can be done by cadres on the spot with application of the participatory principle, and its cost will be directly financed by the local authorities. The data will be gathered and processed without delay uniformly and simply and used immediately to carry out measures of poverty reduction in the community (e.g. used for the program of preventing malnutrition, raising the educational level, loans for the poor). By this character, the questionnaire and the process of survey must be simple, the system of indicators must be easy to calculate.

### **1.2. Poverty related surveys in Vietnam:**

In the mid-1980s some institutions and researchers began to study poverty in Vietnam. Some investigations of the real state of the agricultural economy, the peasants life and the population's living standard as a whole were conducted. Following are the noticeable ones:

- In 1990 the Central Department of Agriculture and the Ministry of Agriculture and Food Industry investigated the real situation of agriculture and the countryside in 5 provinces with about 5000 household samples. This investigation gathered data on income of peasant households [The Central Department of Agriculture, 1991].
- In 1991 the Ministry of Agriculture and Food Industry investigated 3057 poor and rich households in the countryside of 7 provinces. A year later, it investigated additional 3046 households in 9 provinces. [Nguyen Van Tiem, 1994].
- In 1992-1993 The General Statistics Office and the State Planning Committee conducted the first Living Standards Survey with the technical assistance of the United Nations Development Programme and the Swedish International Development Agency. It covered 4800 households in the whole country.[General Statistics Office - Vietnam Living Standard Survey, 1994].
- In 1993 the General Statistics Office investigated and assessed the rich and the poor in the whole country with 93732 sampled households.
- In 1994 the General Statistics Office conducted the multi-targeted investigation of the household in the whole country with 45000 samples.
- In 1995-1996 the General Statistics Office conducted the first national census of the agriculture and countryside covering over 11 million rural households. This was the biggest one so far.
- In 1998 the General Statistics Office conducted the second Living Standards Survey covering about 9000 households.

According to above mentioned survey types, all conducted surveys were quantitative and multi-topic. Except the Agricultural and Rural Census which covered nation-wide scope, all other surveys are sampled surveys.

The above surveys have different purposes and methodologies, therefore the comparison of results as well as through time is impossible. The results have not been dealt with profoundly and analyzed because researchers' ability to approach the database is limited.

One of the first methodological issues of poverty monitoring is definition of the poverty line indicators. Qualitative standards for the assessment of poverty is easily agreed upon. However there are many ways to show them by quantitative standards which are ever different, resulting in different ratios of the poor.[Vu Tuan Anh, 1997].

Following are some remarks on the definition of the poverty line in Vietnam so far:

*First*, it is sound to consider the food standard to be the chief one to determine the poverty limit because it is the existence of the poor. However this standard is used with different extents. The standard brought out by the Ministry of Labour, Invalids and Social Affairs (MOLISA) is 13 kilograms of rice, equivalent to 1500 calories; the General Statistics Office presented 2100 calories, equivalent to VND 840000 in cities and VND 600000 in the countryside; in the investigation of the population's living standard, the standard is 2100 calories, equivalent to VND 902000 and VND 710000 in cities and the countryside respectively.

*Second*, after the poverty line of food is defined, other needs are calculated with different ratios in the overall poverty line. According to the estimate by the MOLISA, 30 percent of

income are used to settle other needs. Other needs are not calculated by the GSO besides food. The household living standard survey takes 40 percent of expenditure for other needs besides food.

*Third*, the value standard of income and expenditure is used as the main tool (if not the only one) to measure poverty. The LSMS relied mainly on the analysis of household expenditure, while the household surveys conducted by Vietnamese institutions have relied on the measure of income.

*Fourth*, although other standard on the degree of meeting basic needs are mentioned, they are not reflected in the poverty line. Poverty level is being assessed mainly by income or expenditure indicator only.

### **1.3. Poverty measurement indicators:**

There are two methods to assess the poverty, the direct and income ones. According to the former, one measures the real amount of consumption of some products and services to meet human basic needs. By the latter they measure either income or expenditure per capita of the household.

These two methods both have good points and defects.

Direct indicators reflect accurately the degree of meeting basic needs, but they have different units of measurement and so cannot be brought together to a synthetic one. Therefore, by the direct method it is difficult to designate a certain limit as the poverty line and rely on it to calculate the number of poor people. But the certain indicator can be used in forming policies in each field, for example improving the nutrition state of the poor by increasing calories and changing the ration structure, elevating the medical service by giving more sufficient supply of medicines, increasing the number of school children at their proper age bracket or eliminating illiteracy, etc.

In contrast, the income or expenditure indicator has general significance but it does not imply all aspects of the human basic needs. By the use of this integrated indicator, the poverty line can be worked out, allowing to find out the number of the poor and poor households in each locality.

Both the above-mentioned methods have been used in the assessment of poverty; however the degree of using the indicators of the two methods is not the same depending on the purpose of surveys.

While the World Bank uses mainly the expenditure indicator as poverty line in LSMS, in some poverty-related documents provided by UNDP, both methods of poverty measurement have been implemented. For example, in a currently prepared for UNDP working paper, T. McKinley proposed four sets of poverty indicators. They cover capability poverty, consumption poverty, lack of wealth, and lack of empowerment. [T. McKinley, 1996].

- The set of indicators of *basic human capabilities* consists of 15 indicators of 5 groups:
  - + Health: life expectancy, under-5 mortality rate, immunization rates.
  - + Nutrition: under-5 underweight, stunting (height for age), wasting (weight for height).

- + Reproduction: low birth weight, % of anemic mothers, infant mortality rates.
- + Education: adult literacy rate, net primary enrollment ratio, primary completion ratio.
- + Housing: floor area per person, % of dwellings with sanitation, % of dwellings with covered floor.

- *Consumption poverty* is measured by monetary indicator of absolute poverty line which includes the cost of the food bundle necessary for minimal caloric intake and a certain percentage of non-food consumption items. This indicator is proposed to be calculated similarly as poverty line with the World Bank's LSMS methodology.

- As *lack of wealth*, poverty can be reflected by different kind of wealth, such as: land, physical capital (machinery, equipment, tools), housing, consumer durables, financial savings, human capital (adult literacy, completion of primary school).

- *Empowerment* concerns people's qualitative states. Quantitative variables cannot capture all aspects of these features. However, some aspects can be reflected through the quantitative indicators, like freedom of job change and travel, participation in social activities, etc.

Poverty measurement indicators have been defined differently in some first MIMAP projects such as Philippines, Bangladesh and India projects [R. Medhora, 1996; C.M. Reyes, 1997; M.K. Mujeri, 1997]. While all projects have been paying attention to the most fundamental human needs such as food, housing, safe water and sanitary facilities, education, health care and income the focus for some other spheres such as means for production and living (land, funds, employment) and social affairs (security, participation of people) has been differently paid by different projects.

It seems that there is a certain difference in data gathering approach between these projects. While the Bangladesh and India projects have been conducting nation-wide statistical surveys, the Philippines project prefers community-based surveys.

The Bangladesh project has made a clear classification between quantitative and qualitative indicator sets. The indicator set of the Bangladesh project consists of 69 indicators, including 24 qualitative indicators and 45 quantitative indicators. The Philippines project, has at the same time developed a two-level poverty monitoring system including barangay (village) and household level. The total number of indicators is 32, of which 16 at barangay level and another 16 at household level.

#### **1.4. Proposed poverty indicator set and monitoring system in Vietnam:**

A specific feature of the data gathering methodology proposed by the research project is the implementation of participatory principle. As mentioned above, most of the living standard surveys use the skilled experts of the national authorities as surveyors. The advantage is that the quality of data collection can be ensured. However, disadvantages are clearly:

- Small survey sample size and no possibility to conduct a poverty monitoring census which might be covering every villages and repeated regularly after relatively short periods;

- Local governmental authorities, non-governmental organisations and people cannot access to data on-time;
- High cost.

A poverty monitoring survey based on the participatory principle will involve local experts, non-governmental organisations and people in the process of data gathering, processing and analysis. It will create opportunity for local people to understand their poverty situation and to encourage them to activate the poverty alleviation measures. At the same time, expenditures of poverty monitoring surveys are relatively low.

The necessary pre-conditions of the implementation of participatory principle in poverty monitoring are:

- Awareness of local governments on their high responsibility in organizing data gathering and processing procedures.
- Availability of mass organisations which are actively operating for poverty alleviation.
- Self poverty monitoring methodology is enough simple so that every common people could understand and implement.

Two first pre-conditions are available in Vietnam. The task of the research project is to elaborate a suitable indicator set and procedures of data processing and analysis.

*a/ Set of indicators:*

The administrative system in Vietnam consists of 4 levels: national, provincial, district and commune. Almost all policies are implementing through these four levels.

The population size of these administrative units is as follows:

- Nation (whole Vietnam): about 80 mil. persons.
- Province: 61 provinces in the whole country, each province has approximately 10 districts. The smallest (by population size) province has about 0.3 million inhabitants, and the largest - about 3 million inhabitants.
- District: there are about 500 districts in the whole country. Each district consists of approximately 20 communes and 10 thousands to 30 thousands inhabitants.
- Commune: there are about 10,000 communes in the whole country. Each commune has approximately 1000 households and 5000 inhabitants.

Depending on regions and ethnic groups of population, there are some villages or hamlets in each commune. Village and hamlet are not administrative units, but settlement units with different size. In the populated delta areas, a village may have hundreds of households, but in the mountainous or newly opened land a village (hamlet) may consist of less than ten households.

In Vietnamese statistical system, beside national statistics service (GSO), there are statistics departments at provinces and districts. They collect data and publish major annual indicators on population, economy and social affairs. These indicators are mainly at macro level. Data on micro level (firm, household) are collected through irregular surveys.

In the National Program for Hunger eradication and Poverty Reduction for the period of 1996-2000, Vietnamese government focuses on two subjects: commune as the basic

administrative unit and household as basic cell of the society. Based on data needs for poverty alleviation policy implementation, we proposed a poverty monitoring system with indicators reflecting the grade of satisfaction of human basic needs at two level: commune and household.

The commune indicators reflect the satisfaction of basic needs mainly in public goods and services such as the supply of safe water, electricity, roads and transportation, schools, sanitation and living environment, public order and security, the participation of the population in community decisions and social activities .(Table 1)

The household indicators reflect the minimum norms of the most basic needs in family and individual life such as food, clothing, dwellings, jobs, health, education. In practice, these norms are poverty lines in different spheres of human-being. (Table 2).

**Table 1: Poverty monitoring indicators at the community level**

<b>Sphere</b>	<b>Indicators</b>
<b><i>I. General living standard</i></b>	1. Percentage of the poor (or poor households). 2. Price of one working day on the local labour market.
<b><i>II. Land</i></b>	3. Cultivated area per capita. 4. Percentage of landless households or households having too few land (under 1/2 of average area per capita in the community).
<b><i>III. Employment</i></b>	5. Percentage of under-employees (not having jobs more than 3 months in a year). 6. Percentage of labourers in agricultural and non-agricultural sectors.
<b><i>IV. Health</i></b>	7. Malnutrition rate of children of 1-5 years old (having the weight under 80% of standards). 8. Child mortality rate. 9. Availability of community health station. 10. Number of medicine staff (public and private) per 1000 inhabitants.
<b><i>V. Education</i></b>	10. Adult illiterate rate. 11. Enrollment of children of primary education age (6-11 years old). 12. Number of teachers per 1000 inhabitants.
<b><i>VI. Housing and sanitary facilities</i></b>	13. Percentage of households having temporary houses. 14. Percentage of households supplied with safe water. 15. Percentage of households having bathroom. 16. Percentage of households having sanitary toilet. 17. Percentage of households using electricity as main lighting energy sources.
<b><i>VII. Culture and communication</i></b>	18. Availability of public cultural facilities in the community (theater, library, broadcasting station). 19. Availability of local market. 20. Number of telephones per 1000 inhabitants.

<b>VIII. People' participation in social activities</b>	21. Number of members of political, mass and social organisations per 1000 inhabitants.
<b>IX. Gender relations</b>	22. Malnutrition rate of pregnant women. 23. Number of women working as public holders and leaders of social and mass organisations per 1000 inhabitants.

**Table 4: Indicators for household poverty monitoring**

<b>Spheres</b>	<b>Indicators</b>
<b>I. Food</b>	1. Food poverty line (per capita amount of rice in one month) 2. Value of per day ration (quality of food)
<b>II. Clothing</b>	3. Availability of necessary clothe blankets in cold seasons. 4. Availability of necessary mosquito nets.
<b>III. Employment</b>	5. Un- and under-employment (lacking jobs over three months a year)
<b>IV. Health</b>	6. Children in the 1-5 age bracket malnourished (under 80 percent of weight necessary for age) 7. Adults in 15-60 age bracket have chronic disease 8. Unable to have medical care in illness
<b>V. Education</b>	9. Adult's illiterate 10. Children in 6-11 age bracket don't go to school
<b>VI. Housing</b>	11. Household has no radio or TV 12. Household lives in tents and huts

*b/ The process of gathering and processing data:*

The commune data are gathered by a cadre of statistics in the village authorities on the basis of reports by administrative institutions, schools, and mass organizations. The acquisition of the above data is quite possible if the cadre of statistics of the commune is entrusted with this task and paid a certain subsidy for the job. In case the level of knowledge of the village cadre is limited (as in some mountainous areas) the regular gathering of these data can be entrusted to teachers working in the local school.

The data at household level are also investigated once in every six-month or one year period.

Most of the indicators are simple, they can be gathered by interviews combined with rapid observations. Only malnutrition rates requires measurement and this is also a simple job which can be done by anyone. So some investigations can be entrusted to mass organizations as the Women, Peasants, Gardeners' Associations which are active members of the Board of hunger eradication and poverty reduction of the village. Here the participatory principle should be widely applied.

After gathering primary data, the village cadre of statistics will synthesize it according to two systems the community and household levels. The comparisons of poverty standards of the household level will reveal which ones belong to the category getting priority in support.

Corresponding diagrams of the above data are also made at the district and province levels.

In order for the process of poverty monitoring as above to have feasibility, the restoration of function of the cadre of statistics in communes and enhancement of their capacity are most important.

## **2. The pilot poverty monitoring survey conducted in 1998**

### **2.1. Methodology of survey:**

In the first phase of the research, the project has conducted two surveys. The first survey covered 600 households in two communes: one of which in Thai Nguyen province (mountainous region) and another in Ha Nam province (Red River delta). This survey was aimed to define the main characteristics of households and to test the proposed questionnaires and indicator set. Based on the results of this survey, the research team has readjusted the proposed methodology, in particular the questionnaires, the criteria for selection and training methods of local surveyors.

A second survey was conducted with the aim to check the capacity of proposed poverty monitoring system which based on participatory principle.

#### *Survey sample*

The surveyed sites are located in three provinces: Bac Kan (Northern Mountains), Nghe An (Coastal Delta) and Ha Tinh (Midlands). All three provinces have higher poverty rate in comparison with other provinces in Vietnam.

The elaboration of survey sample was carried out by method of selecting intended representative according to levels, ratios with the quantity of administrative units at various levels and the population size in each locality. The selection of communes to be included in the survey samples was made with the account of the disparity in geographical regions (mountain, midland, delta).

The survey was conducted in 40 communes within 16 districts of three provinces, with 8 surveyed communes in Bac Kan province representing 20%, 20 communes in Nghe An province, making up 50% and 12 in Ha Tinh province, accounting for 30% of the total.

According to their geographic features, such communes are classified into three types: mountainous, midlands and delta areas. The mountainous communes are the ones which meet with the most difficulties in socio-economic development and therefore have more serious poverty. The number of surveyed mountainous communes accounts for 100% of Bac Kan, 25% of Nghe An and 50% of Ha Tinh.

**Table 3: Surveyed communes**

	<b>Total</b>	<b>Bac Kan</b>	<b>Nghe An</b>	<b>Ha Tinh</b>
Total	40	8	20	12
%	100.0	20.0	50.0	30.0
Mountainous	19	8	5	6
%	47.5	100.0	25.0	50.0
Midlands	9	0	7	2
%	22.5	0	35.0	16.7
Delta	12	0	8	4
%	30.0	0	40.0	33.3

Total number of survey samples were 40 communes and 1000 households. 25 households were surveyed in each commune. The numbers of households selected in provinces are rather proportionate to the population of such provinces.

In order to check of capacity of the indicators in living standard reflection, by selection of survey samples the research project requested commune's leaders to define three lists of households by living standard category: rich, middle and poor households. The structure of to-be-selected households was defined by proportions of the households in three lists.

Below is the description of the 1,000 household survey samples according to some major norms.

**Table 4: Household sample structure**

	<b>Number of households</b>	<b>%</b>
<b><i>Province</i></b>		
Bac Kan	204	20,3
Nghe An	501	49,8
Ha Tinh	301	29,9
<b><i>Region</i></b>		
Mountain	531	<b>52,8</b>
Midland	200	19,9
Delta	275	27,3
<b><i>Living standards</i></b>		
Poor	212	<b>21,1</b>
Middle	620	61,6
Rich	173	17,2

### *Data gathering:*

Applying participatory principle, members of the research project operated in provinces and district in capacity of supervisors. They invited local officials, teachers, members of mass organisations in districts and communes to participate in the survey in capacity of surveyors. The members of research team trained local surveyors and supervised them during the data collection process.

### *Data processing and analyzing:*

Main independent variants used for processing and analyzing include:

1. Province, district, commune group according to regions.
2. Households: size, occupation, living standards, duration of residence in the locality.
3. Household masters: ethnicity, sex, occupation, age, education level.

The processing of household questionnaire data and commune questionnaire data was made on SPSS/PC softwares. The calculation has yielded statistical values of variants such as average, frequency (%), the correlations between dependent variants and main independent variants.

## **2.2. Survey results at commune level:**

### **1/ Characteristics of surveyed communes:**

The average land area of a surveyed commune is 3,330 ha. The size of a mountainous commune is 8.1 times larger than that of a delta commune and 3.4 times larger than a midlands commune. 100% of the communes in Nghe An province are in delta regions; hence the average area of a commune is much smaller there than in Bac Kan and Ha Tinh provinces. The size of a surveyed commune in Nghe An is about 0.7 times the size of a commune in Bac Kan and 0.4 times that of a commune in Ha Tinh.

**Table 5: The average area of a commune**

	<b>Average area (ha)</b>	<b>Comparison (Average area = 100)</b>
Total	3330	100.0
<i>By province:</i>		
- Bac Kan	3086	92.7
- Nghe An	2196	65.9
- Ha Tinh	5384	161.7
<i>By region:</i>		
Mountainous	5757	172.9
Midlands	1703	51.1
Delta	707	21.2

## **2/ Population and ethnicity**

On average, a surveyed commune has 1,212 family households with 5,422 persons. Each family has an average of 4.47 persons.

The population of a delta commune is 1.6 times bigger than that of a mountainous commune. A midlands commune has the largest population, which is 1.1 times bigger than a delta commune and 1.8 times that of a mountainous commune

According to gender, the male population is smaller than the female population, with the former representing 93.9% of the latter .

The average population growth rate in the surveyed communes is 1.58%, which is lower than the national average (approximately 1.8%). If the statistics on the communes are accurate, such a trend of population growth rate proves positive.

In the 40 surveyed communes, the inhabitants belong to 10 ethnic groups: Kinh, Tay, Nung, Dao, Thai, Lao, Thanh, Chut, Kho Mu, Hoa.

Most of the ethnic minority groups live in mountainous areas, mainly Bac Kan where reside people of Tay, Nung, Dao and Thai groups. Meanwhile, residing in Ha Tinh are people of the Nung, Lao and Chut groups and in Nghe An, are the people of Thai, Lao, Thanh, Hoa and Kho Mu groups.

## **3/ Labour resources:**

The number of people in the working age group accounts for 41.8% of the total population. This figure is very low in delta communes, being only 39%.

Similar to the national population structure, the number of male labourers is smaller than that of the female labourers. This is a common phenomenon in rural areas because: first, the male population is smaller than the female population; and second, a section of the male labourers have moved to work in other fields such as industries and construction, joined the army or State apparatus, or continue to study, etc.

## **4/ The land resources:**

The average per-capita land area for agricultural production, forestry and fisheries in the surveyed communes is nearly half a hectare (in concrete terms 4,500m<sup>2</sup>), including 857m<sup>2</sup> of agricultural land, representing 19%; 3,446m<sup>2</sup> of forestry land, making up 76.5% and 198m<sup>2</sup> of water surface, accounting for 4.5%.

The per-capita agricultural land area in the mountainous communes is 1.5 times larger than that in a midlands commune and 1.8 times than that in a delta commune.

The forestry land funds of the communes in Bac Kan and Ha Tinh provinces are more than seven times bigger than those of Nghe An province, because all surveyed communes in Bac Kan and Ha Tinh are in mountainous regions where forest area remains large whilst the communes of Nghe An are in the delta areas where “the land is small and people are numerous”.

The mountainous communes have forestry land areas nineteen times larger than the midlands communes. In delta regions, the forestry areas are not worth mentioning, for they are insignificant in comparison with other regions.

Among the land used for agricultural purpose, the land for short-term (annual) plants on average accounts for 78% in the 40 surveyed communes; 41% in communes of Bac Kan province; 86% in Nghe An; and 89% in Ha Tinh. In delta areas, almost all agricultural land (98%) is used for the cultivation of short-term plants; while the figure for the midlands region is 85% and the mountainous region is only 63%. The remainder of the agricultural land is for the cultivation of perennial trees.

Among the short-term plants, rice still occupies the most important position, accounting for 68.5% of the land area cultivated with annual plants in 40 communes. The respective figures for Bac Kan, Nghe An and Ha Tinh are 73%, 65% and 74%. According to the geographic terrain, such figures are 54% in the mountainous regions, 81% in the midlands regions and 74% in the delta regions.

## **5/ Infrastructure:**

### **a. Communications and transport:**

Communication roads constitute the most important component of infra-structure, which help to narrow the economic, social and cultural gaps between communities.

Of the 40 surveyed communes 39 have sealed roads and only 1 commune in Ky Son district (Nghe An) has no accessible road. This commune centre is 3 km from the nearest sealed road, to travel such a distance is a three hour walk in mountainous conditions. However, 100% of the communes, including that having no sealed roads, held that the most convenient way to travel to the nearest urban centre (the provincial city, district town, the provincial capital, the district capital) is the sealed road, of the 40 communes 39 use sealed roads to travel to the nearest trading centre (the district town, marketplaces). Only 1 commune in Bac Kan held that the most convenient way to travel to the market place is to walk on unsealed paths.

Railroads and waterways are not the most convenient means used by the surveyed communes. The average distance between the commune and the nearest railway station is 54 km, which is 111 km in Bac Kan, 48 km in Nghe An and 27 km in Ha Tinh; or 87 km for the mountainous area, 35 km for the midlands area and 15 km for the delta.

The average distance from the 40 communes to the nearest wharf or ferry is 33 km, which is specifically, 46 km for Bac Kan, 29 km for Nghe An and Ha Tinh; or 57 km for the mountainous communes, 15 km for the midlands communes and 10 km for the delta.

Generally, traffic in the delta communes is convenient, with distances not too long, and with various kinds of communication and transport means. However, in the mountainous regions, communications remains a question of the highest priority.

### **b. Electricity.**

Among the 40 surveyed communes, 6 mountainous communes (5 in Bac Kan and 1 in Nghe An) do not yet have a national grid electrical supply, they account for 15% of the total.

Whilst most of the delta and midlands households use electricity from the national grid, many households in the mountainous areas have not been supplied therewith due to the lack of transmission lines linking the national grid to households. This is attributed mainly to the dispersed distribution of the population. Therefore, in the mountainous communes, a considerable number of families use electricity supplied largely by small generators. For instance in 7 out of 8 surveyed communes of Bac Kan province, people use electricity from

such a source, with an average of 10% of the households in a commune having small generators for the supply of electrical power. The figure of 70 small generators in a commune shows that if the income of the family household is increased, the supply of electricity to the mountainous population can be achieved quickly and effectively through small generators, without having to wait for State investment in transmission lines from the national grid, which is very costly.

**c. Schools.**

All surveyed communes have at least one primary school. Some have two or even three. On average, each commune has 1.7 primary schools with 26 classrooms.

Of the 40 surveyed communes 35 have junior-high schools (accounting for 87.5%). Each commune has 1 junior-high school, not to mention the district and provincial capitals. Each junior-high school has 13 classrooms on average, representing only half of the number of classrooms of a primary school.

However, the structure of the buildings varies qualitatively and quantitatively from school to school. Schools in mountainous areas are small and poor in construction quality.

In 16 communes, including 12 mountainous communes and 4 midlands communes, schools remain makeshift, made of wood or bamboo and roofed with leaves.

One-storey brick buildings are commonly constructed for schools, these exist in 34 communes, including 17 mountainous communes, 7 midlands communes and 10 delta communes.

Of the surveyed communes 12 have built multi-storey brick buildings as school-buildings. Among the above-mentioned 12 communes, 1 is in the mountainous, 3 in the midlands and 8 in the delta.

**d. Medical establishments:**

The grassroots medical station (in communes) constitutes one of the important infrastructure projects to which the Vietnamese government has attached importance. A national programme has been formulated for the establishment of at least one medical station in a commune in order to meet the fundamental needs of the people for medical examination and treatment and to apply measures of primary health care. All surveyed communes have their own medical stations though their structural facilities remain very poor.

In 5 mountainous and midlands communes in Bac Kan and Nghe An, the medical stations are housed in makeshift buildings made of bamboo and/or wood with thatched roofs. In such buildings, it is difficult to ensure the quality of medical examination and treatment. Only 2 communes (1 in Nghe An and 1 in Ha Tinh) have built solid brick buildings for their medical stations. Commonly seen among the remaining communes are semi-solid one storey brick buildings used as the medical stations.

**e. The media:**

For many years now, the Vietnamese Government has made great efforts in building commune-run public address systems with a view to helping the local population, particularly the poor who can not afford their own audio-visual equipment, to have access to political, cultural, social, scientific and technical information. Besides relaying major radio

programmes from "The Voice of Vietnam", the commune public-address systems broadcast information on the internal affairs of the communities in communes, popularise farming techniques as well as scientific and technical knowledge that is of interest to local people. In spite of their shortcomings, the public address systems have proved their value among the poor communities, particularly in disseminating knowledge to people.

Yet, the adverse is that such commune public address systems have operated well in delta communes where there are few poor people but many opportunities to obtain rich information, whilst in mountainous and some midlands communes where people are isolated not only in terms of geographic location but also in terms of access to information, public address systems have not yet been set up or no longer exist. The reasons for this are that communes in such regions are spread widely, and the local cadres have poor technical knowledge and are unable to operate such systems. As a result, only a few commune (11 communes, accounting for 27.5%) public address systems exist so far.

A very popular means of communications at present is the telephone. The number of telephones per number of persons is an index which shows the socio-economic development level of communities.

On average, each commune has 5.8 public and 25 private telephones. So, there is 1 telephone for every 176 persons. The figure is 1 telephone for every 406 persons in the mountainous region, 216 persons in the midlands and 102 persons in the delta; or every 557 persons in Bac Kan, 135 in Nghe An and for every 306 persons in Ha Tinh.

#### ***f. Conditions for economic exchange:***

If the separation from information constitutes one of the causes of poverty, the separation from economic exchange is a factor obstructing the process of progressing from the self-sufficient economy of the rural population to a market economy.

Rural markets constitute a means of economic exchange amongst households and at the same time reflects the development level of the rural economy. Of the 40 surveyed communes, 24 (accounting for 60%) have their own marketplace. 45.8% of the markets are held daily; 37.5% held several times a week and 16.7% once a week.

For the communes having no market, the average distance therefrom to the nearest marketplace is 4.5 km, namely it takes more than 1 hour to walk; or, in real terms, 6 km for the mountainous and midlands communes and 2 km for the delta communes.

#### **6/ Economic situation of the surveyed communes:**

Since the implementation of the "Doi moi" (renovation) policy, the economic activities in rural areas have been carried out mainly by family households. The community units (such as co-operatives, village/hamlets, communes) have play a very weak role in such activities. Therefore, in this socio-economic survey, the research group focused on analysing economic issues at the household level. At the commune level, the survey aimed at bringing out a general economic picture which cannot be fully reflected through the study of several sample households. The picture will outline the diversity of rural economic activities, the economic resources which can be exploited by communes, the extent, economic efficiency and the social impact of that exploitation.

#### ***a/ The diversity of economic activities:***

So far, agricultural production has been the main economic activity of the population in most of the surveyed communes, involving between 80-95% of the total number of households in communes, with the highest percentage being around 95% in Bac Kan. In delta areas, the economic activities are more diversified, as seen through the lower percentage of agricultural households but a higher percentage of non-agricultural occupations. The number of households doing non-agricultural jobs has, however, accounted for only 20%.

**Table 6: Household percentages according to main jobs done by household members (%)**

	Agriculture	Forestry	Fishery	Industry & handicrafts	Construction	Trade	Services	Other
Total surveyed communes	85.0	2.4	0.3	1.8	0.8	1.8	2.8	5.1
<i>By province:</i>								
- Bac Kan	94.7	2.3	0	0	0	0.1	1.1	1.8
- Nghe An	82.3	3.1	0.4	2.0	0.9	1.7	3.8	5.8
- Ha Tinh	86.9	1.0	0.3	1.8	0.8	3.0	1.2	5.0
<i>By region:</i>								
Mountainous	89.9	1.5	0	1.1	0.2	1.9	0.9	4.5
Midlands	86.6	6.1	0.3	0.8	0	0.6	2.7	2.9
Delta	79.1	0	0.7	3.3	1.8	3.0	4.5	7.6

Bac Kan is the locality where the population are working purely in agriculture and forestry. These two fields of economic activity involve 97% of the households. Non-agricultural activities are not seen in the locality, except for trading in agricultural supplies and essential goods in service to the people in the communes, which involves about 1% of the households.

In the communes of Nghe An and Ha Tinh provinces, trade and services have constituted a major part of the non-agricultural activity, involving 4.2 - 5.5% of the total number of households. These two sectors are followed by industry (including cottage industry and handicrafts) and construction, which involve 2.5 - 3% of the number of households. What is worrisome is that industry, cottage industry, handicrafts and construction are less developed in the surveyed communes, even in the delta communes less than 5% of the households are engaged in these fields.

#### **b/ Production machinery and equipment**

The index on production machinery and equipment reflects the level of investment as well as mechanisation of production. Generally, the quantity of machinery in the surveyed communes is small. The percentage of communes having machinery and equipment of fairly high value such as tractors, farm machines, agricultural product processors, means of transport, etc. is not so high among the surveyed communes.

The survey collected 3 types of data:

- The absolute number of communes having production machinery and tools
- The percentage of such communes amongst the total number of communes (according to provinces, regions).
- The average number of machines and equipment of 1 commune that has such types of machines and equipment.

Survey data shows that machinery of high value and high capacity which can be used by many households such as large tractors are few. Small machines and equipment used for one or several households such as small tractors, pumping machines, agricultural product processors, boats, etc. are seen in most communes, particularly in the delta and midlands regions, though their quantities still present a small percentage as compared to the total number of households. Taking an average estimate for all surveyed communes for example: Every 213 households have 1 large tractor; 116 households have 1 small tractor; 7 households have 1 rice thresher, 65 households have 1 rice husker, 148 households have 1 animal feed grinder; 11 households have 1 water pump, 25 households have 1 boat and 98 households have 1 motorised boat.

### **c/ Cultivation:**

Food plants, first of all rice, constitutes the major crop in all surveyed communes. The average area of land for the cultivation of different kinds of rice in different crops (spring, summer, summer-autumn, autumn crops, terraced field rice...) is 448.7 ha/ a commune, with the average out put of 1,610 tons and the average yield of 3.6 tons/ha. With such rice acreage and yields, the average per-capita rice output in the 40 surveyed communes has reached only 300 kg, which is much lower than the national average (400kg) and even than the average of the 16 surveyed districts (340kg).

Besides rice, other food-bearing plants (maize, potatoes, manioc..., called collectively, subsidiary food crops) are also planted to supplement food sources for both people and domestic animals. Similar to rice, the survey collected data on:

- The number of communes which have planted such crops (communes)
- The average commune area under such crop (ha)
- The 1997 yield (ton/ha)

The non-food plants are diversified. In addition to vegetables and fruit trees, groundnut, green bean, soya-bean, sugar cane, tea... have been widely cultivated in many communes. Except for groundnut, which is the traditional crop of Nghe An, other kinds of plant have been cultivated mainly to meet local demand.

### **d/ Animal husbandry**

Buffalo, cattle, pigs, ducks, chickens are the main animals raised by households in all of the surveyed communes. On average, each family raises 1 buffalo or cow. The basic figure is 2 for every 3 households in the mountainous areas and 1 for every 2 households in the delta. Buffalo and cattle are raised as draught animals for farm work and transport and also for sale to earn a large sum of money for families. In many areas inhabited by ethnic minority people, the number of buffalo or cattle is considered an evaluation index of the wealth of a family.

Pigs are raised for family consumption and also for sale. Each family raises 1.6-2 pigs on average and a flock of several dozen chicken and ducks mainly to supply meat for the family.

In addition, people in some localities raise horses for transport (10 communes, an average of 5 horses per commune), goats and deer for meat (in 29 communes, in average 110 head per commune), and bees for honey (14 communes, in average 200 beehives per commune)

Generally, animal husbandry is a sideline which yields income for households and supplies protein and lipids for the daily meals in rural households. However, domestic animals raised in small quantities cannot provide enough protein for the rural population. Aquatic products caught in lakes, ponds, fields or raised become a major source of protein for the majority of the rural population, particularly the poor.

### **e/ Forestry**

Of the 40 surveyed communes, 28 have forest land, including 18 mountainous communes, 8 midlands communes and only 2 delta communes. Each mountainous commune has more than 7,000 ha of forest land while a midlands commune has 2,000 ha and a delta commune, only 65 ha.

Though the State has implemented a policy of assigning forests to individuals and groups for care, management and exploitation, the percentage of forests managed by households is not so high, particularly in mountainous regions. In order to plant and preserve forests, capital and labour has to be invested in a long-term manner. New forests can only provide initial yields after at least 7 to 10 years. There is also a contradiction in that forestry development potential in a number of surveyed communes is very great but the capability to exploit such potential is limited due to the poverty. Therefore, forestry development has been confronted with more difficulties than other areas where the business cycle is shorter such as the cultivation of short-term plants, animal husbandry, fish-farming.

### **g/ Industries and handicrafts.**

As remarked in above section on the diversity of the economic activities, in the surveyed communes, industries and handicrafts are less developed. Data obtained in surveyed communes shows that only 27 of the 40 communes (accounting for 67.5%) have at least one industry or handicraft. The percentage of communes with industries and handicrafts, according to province, is 12.5% for Bac Kan, 75% for Nghe An and 91.7% for Ha Tinh; or, according to geographic region, 47.4% for the mountainous, 77.8% for the midlands and 91.7% for the delta.

Each of the 27 communes mentioned above has, on average, 155 households with members involved in industrial or handicraft production. The corresponding figure is 306 households for the delta; 50 households for the midlands and the mountainous respectively.

## **7/ Living conditions:**

### **a/ Residential housing**

Most of the residential buildings in the surveyed communes are semi-permanent constructions: wooden houses, brick houses with thatch or palm-leaf roofs. Such styles of housing comprise between 65% and 80%.

The second type of housing is brick with tile or concrete (flat) roofs, which account for from 10 to 20%.

The number of households living in earthen wall and thatched roof houses, huts or in the houses others accounts for from 5% to 15%.

The solid multi-storey buildings represent a small percentage, around 1%, largely in delta communes, district and provincial capitals.

It can be remarked that the residential housing structure corresponds to the structure of the living standard of the people. Households with solid houses or brick with tiled-roofs are usually wealthier families; households with average living standards in the countryside often have semi-permanent houses made of wood or one-storey brick houses. The percentage of makeshift huts corresponds to the percentage of poor and hungry families in localities.

Due to the economic renewal policy, the living standards of a number of households has been raised. Therefore, the construction and repair of housing has been thriving in rural areas. According to survey data, about 9% of the households in the surveyed communes have built solid or semi-solid housing (multi-storey buildings, brick houses, wooden houses) over the past two years. The corresponding percentages for the localities are: 1.7% in Bac Kan; 11.5% in Nghe An; 7.2% in Ha Tinh; or 5.7% in the mountainous region, 12.3% in the midlands and 9.9% in the delta.

### **b/ Clean water**

Water, taken from wells sunk by people with rudimentary tools, is the major source of drinking water for the people in the surveyed localities. The percentage of households using such sources of water is from over 50% (in Bac Kan and delta communes) to 80-90% (in Ha Tinh and the midlands).

Drilled wells which produce clean water from deep underground sources are still rarely seen in the midlands and mountainous regions, whilst they represent 30% of the total water wells in the delta.

Drinking water taken from natural sources (rivers, streams, lakes) is seen only in the mountainous regions, with about 15% of the households having to use such sources. In fact, these sources produce rather clean water if it is properly transported and stored in a hygienic way. In many delta areas where natural conditions are often harsh, without any sources of underground or surface water, people have to use rain water in their daily needs. This is a good source of water, however, in order to store and use it, a large sum of money is required for the construction of storage tanks. This is not easy, particularly for poor people.

### **c/ Sanitation facilities**

People in some communes are not accustomed to protecting the hygiene of their environment. Up to 40% of the households discharge garbage into rivers, streams, ponds, lakes without treatment. The percentage is particularly high in the mountainous regions where people have had no tradition of using garbage for making compost because of living in vast areas. In regions where land is limited and people are accustomed to making compost from garbage, some two thirds of the local households treat the waste matter (burn, bury, throw into animal stables to make compost).

Though campaigns for building toilets which have hygienic systems (decomposition toilet, decomposition privies, double vault compost latrine) have been in action many years, only half of the households have toilets meeting hygienic standards. The figure is higher in the delta communes, up to 80%, but lower in the mountainous areas, only about one third of the households. Worthy of note is that over 10% of the households do not have their own toilets or privies.

#### **d/ Durables**

Bicycles, electric fans, radio cassettes are popular things in households, they satisfy the aesthetic needs in life. Moreover, such things are affordable to average families.

If television sets (black and white or colour) are added to the above items, the number of households possessing them accounts for about 40%. There is a gap, though not wide, between the provinces or regions. The percentage of households owning television sets varies from 30% (for the mountainous communes) to 50% (for the delta communes). The number of households owning expensive items of such as automobiles, motorbikes, etc. is not high.

**Table 7: The percentage of households with durables (%)**

	Total	<i>By province</i>		<i>By region</i>			
		Bac Kan	Nghe An	Ha Tinh	Mountainous	Midlands	Delta
Colour tv set	26.1	7.4	35.4	23.0	14.0	28.2	43.5
White-black TV	13.1	28.7	9.0	9.5	18.7	6.5	9.3
Video player	4.6	1.4	6.3	3.8	3.5	2.3	8.0
Radio cassette player	41.2	25.3	45.9	44.0	31.5	51.5	48.9
Motorcycle	10.5	18.5	9.2	7.2	12.3	7.3	9.9
Bicycle	82.7	65.2	85.1	90.0	72.8	81.5	99.1
Sewing machine	7.9	8.4	10.6	3.3	6.2	7.8	10.7
Electric fan	62.3	28.5	75.2	66.5	38.1	83.6	87.8

#### **8/ Education in the surveyed communes**

As mentioned in the above section (on infrastructure / schools), each commune has 1 or 2 primary schools (from 1st to 5th grade) and almost all communes have 1 lower secondary school (from 6th to 9th grade). The figures presented below will allow us to imagine the primary and junior-high schools in a commune (Table 7).

Though a mountainous commune is large in area but small in population, schools are widely scattered. Therefore, the number of schools in a mountainous commune is greater than that in a delta or midlands commune. But, the mountainous school is much smaller in size than the delta schools.

In surveyed communes, including those in the mountainous regions, the number of

teachers is according to the prescribed norm, 1 teacher for every 20-25 pupils.

**Table 8: The average number of schools in a commune.**

	Total	By province			By region		
		Bac Kan	Nghe An	Ha Tinh	Mountainous	Midlands	Delta
<b>Primary school</b>							
Number of schools	1.7	1.3	2.0	1.5	1.9	1.5	1.5
Number of classes	26	18	31	23	25	31	25
Number of teachers	36	21	46	29	31	43	39
Number of students	876	491	1077	797	724	1160	902
<i>Of which:</i> Male/Female (%)	92.7	89.5	93.0	92.9	90.5	95.4	92.5
<b>Lower secondary school</b>							
Number of schools	1.1	1.0	1.0	1.2	1.2	1.0	1.0
Number of classes	13.7	7.5	17.3	11.4	10.7	13.7	17.9
Number of teachers	24	12	31	20	17	22	36
Number of students	530	264	643	469	365	624	706
<i>Of which:</i> Male/Female (%)	94.6	90.0	95.1	94.6	93.1	100.0	91.6

Surprisingly, though most surveyed communes are economically underdeveloped and people are poor, the number girls in primary and lower secondary school is almost equal to or in some cases, even higher than the number of boys. This ratio is approximately equal to the ratio between genders in the total population. This shows that the majority of families have no or little gender discrimination in sending their children to primary school. However, the percentage of girls is reduced slightly at the lower secondary education level and reduced considerably at the upper secondary education level (from 10th to 12th grade). This reflects the preference of boys to girls which still prevails in the countryside.

Yet, a small number of children are not sent to school. About 2.7% of children in the 6-11 age group (namely the age of primary education under the Law on Enforcement of Primary Education) do not go to school. The corresponding figure for the delta areas is 1.9%, the midlands: 2.5% and the mountainous: 3.5%. Almost all such children are in poor or very poor families. It is not accidental that the percentage of children not in school is almost equal to the percentage of hungry families in localities.

The number of girls not going to school is greater than the number of boys. The ratio is 100

girls to 77 boys in the 6-11 age bracket, who do not go to school. In the mountainous communes, the ratio is 100/72.

The number of illiterate adults accounts for nearly 2% of the total population; with the highest percentage being in the mountainous communes, which is about 3.8%. The number of illiterate females is almost double that of illiterate males.

In 24 communes surveyed for data on illiteracy, literacy classes have been opened over the past two years. About 1% of the total population joined such classes, of which half are female and half are male. In mountainous communes, the number of participants accounts for about 1.3% of the population, of which two thirds are male and one third are female. In delta communes, the literacy classes have attracted 0.4% of the population and the ratio is two thirds male to one third female. So, the number of illiterate women is greater but the number of women attending literacy classes is smaller; hence the educational gap between the genders is being widened.

Another aspect in raising the educational level is the availability of access to books and newspapers. In all communes, people can subscribe to newspapers through the postal network. However, among the 40 surveyed communes, only 15 (representing 37.5%) have book and newspaper stands in their respective localities, 50% of the communes in Bac Kan have their own book and newspaper stands, and the figure for Nghe An is 30% and Ha Tinh, 42%; or according to the geographic area, the figure is 42% for the mountainous communes; 33% for the midlands and also for the delta. For communes which do not have book and newspaper stands, the average distance to the nearest book and newspaper stand is 7.3 km; Ha Tinh 4.9 km; or the mountainous 10.8 km; the midlands: 5.7 km and the delta, 4 km.

The lack of book and newspaper stands in the countryside can be attributed to the low purchasing power of peasant households and to the high price of books and newspaper. Therefore, except for children's textbooks, other books and newspapers, even dailies, are rarely seen in peasant households. Knowledge is passed through the radio and television networks or through mutual learning experiences or training courses.

### **9/ Health care in the surveyed communes:**

Of the 40 surveyed communes, 39 have their own medical stations. The only commune which has no medical station is in Bac Kan and the distance to the nearest medical station is 5 km.

On average each commune has 7.6 medical doctors and assistant medical doctors. The specific figure for Bac Kan is 2.6; for Nghe An: 7.8; and for Ha Tinh 10.8. Such differences between regions can be attributed partly to the population size of a commune, which is much greater in the delta and midlands than in the mountainous area, partly to the different areas, terrain and population distribution of regions, and also to the inclusion of all medical workers in both public and private sectors into the survey data. On average, every 1,000 people in 40 surveyed communes have 1.4 physicians and assistant doctors. The corresponding figure for Bac Kan is 0.7; Nghe An: 1.1 and Ha Tinh: 2.2; or for the mountainous areas is 1.8; the midlands: 0.8; and the delta 1.5.

There are in each commune approximately 10.8 nurses. However, the figure varies substantially: in Bac Kan: 0.6; Nghe An: 15 and Ha Tinh: 10. The corresponding figure for every 1,000 people is 0.2 in Bac Kan, 2.2 in Nghe An and 2.1 in Ha Tinh. So, clearly, Bac

Kan has a serious shortage of nurses.

Similarly, for every 25,000 people there is one pharmacist, whilst the corresponding figure for Nghe An is 5 and Ha Tinh, 8.8. Additionally, for every 5,000 people in Bac Kan there is one midwife, whilst the figure for Nghe An is 1.8 and Ha Tinh 2.8.

A number of important health care issues such as the mortality rate among children aged under 1 and from 1 to 5; the death rate of women in childbirth, the rate of malnutrition children aged under 5 are calculated as follows (Table 8)

**Table 9: Some indicators on health of mothers and children**

	Total	<i>By province</i>			<i>By region</i>		
		Bac Kan	Nghe An	Ha Tinh	Mountainous	Midlands	Delta
Death rate of children aged under 1 year (%)	1.5	1.7	1.5	1.6	2.6	1.2	1.3
Death rate of children of 1-5 years old (%)	0.33	0.37	0.35	0.29	0.36	0.53	0.15
Death rate of mother during childbirth (%)	0.1	0	0.2	0	0.1	0.08	0
Malnutrition rate of children under 5 years old (%)	30.0	17.1	32.7	34.1	25.9	50.9	20.8

## **10/ The poverty situation and impacts of implementation of the National Program for Hunger Eradication and Poverty Reduction**

As mentioned in Section 1, according to the hunger and poverty criteria set by the Ministry of Labour, War Invalids and Social Affairs, communes have determined, annually, the number of poor and hungry households. Generally, 28.2% of the households with 24.8% of the household members have suffered from hunger and poverty. These figures are higher than the national average (19.3% of the households) and also higher than the average figures for the surveyed communes. The reason for this is that the communes selected for the survey are poorer than other communes in a district.

Worthy of note is that up to 9% of the households and more than 7% of the people in communes still suffer from chronic hunger. With 28% of the households suffering from hunger and poverty, in particular, nearly 40% of the mountainous households suffer from hunger and poverty, the hunger elimination and poverty alleviation programme will face huge challenges in the coming years.

**Table 10: The poor and hungry households rate (%)**

	Total	<i>By province</i>			<i>By region</i>		
		Bac Kan	Nghe An	Ha Tinh	Mountainous	Midlands	Delta
Rate of hungry households	9.4	5.4	10.5	9.7	14.2	8.3	2.8
Rate of hungry people	7.3	6.2	6.1	10.1	10.2	8.2	2.7
Rate of poor households	18.8	25.3	15.1	20.6	24.6	16.2	11.6
Rate of poor people	17.5	27.4	10.8	22.0	23.1	16.2	11.2
Rate of poor and hungry households	28.2	30.7	25.6	30.3	38.8	24.5	14.4
Rate of poor and hungry people	24.8	33.6	16.9	32.1	33.3	24.4	13.9

Since the middle of the 1980's, a number of measures have been applied to eliminate hunger and reduce poverty in localities. Some measures have been aimed directly at the poor, such as the granting of difficulty allowances, exemption or reduction of school fees and medical charges. Meanwhile, some other measures have been aimed not only at poor people but also at others, such as capital lending, construction of infrastructure, provision of technical training and... Table 10 presents three indices:

- The number of communes having applied measures;
- The percentage of measure-applying communes against the total surveyed communes according to locality and region;
- The percentage of households benefiting from the application of measures against the total number of households in a commune (average)

**Table 11: Application of hunger elimination and poverty alleviation measures**

	Total	<i>By province</i>			<i>By region</i>		
		Bac Kan	Nghe An	Ha Tinh	Mountainous	Midlands	Delta
Getting loans	33 com.	6 com.	15 com.	12 com.	15 com.	9 com.	9 com.
	82.5%	75.0%	75.0%	100.0%	78.9%	100.0%	75.0%
	14.2%	30.4%	12.7%	12.3%	21.6%	11.3%	9.9%
Exemption of education fees for children of poor	22 com. 55.0%	2 com. 25.0%	10 com.	10 com.	7 com. 36.8%	6 com. 66.7%	9 com. 75.0%

households	2.6%	0	50.0%	83.3%	1.7%	1.3%	4.4%
			2.8%	2.9%			
Exemption of hospital fees for the poor	19 com.	3 com.	9 com.	7 com.	8 com.	3 com.	8 com.
	47.5%	37.5%	45.0%	58.3%	42.1%	33.3%	66.7%
	4.3%	14.1%	3.9%	1.9%	7.5%	1.5%	3.5%
Getting allowances from hunger or disaster funds	11 com.	0	6 com.	5 com.	5 com.	3 com.	3 com.
	27.5%		30.0%	41.7%	26.3%	33.3%	25.0%
	1.0%		1.0%	1.1%	0.6%	1.7%	0.8%
Training courses on production techniques and business management	9 com.	2 com.	6 com.	1 com.	4 com.	2 com.	3 com.
	22.5%	25.0%	30.0%	8.3%	21.1%	22.2%	25.0%
	2.8%	10.0%	2.8%	0.5%	4.3%	2.3%	1.9%
Allocation of additional land to the poor households	2 com.	0	0	2 com.	2 com.	0	0
	5.0%			16.7%	10.5%		
	0.2%			0.2%	0.2%		
Benefited by public infrastructure construction projects	11 com.	2 com.	7 com.	2 com.	7 com.	2 com.	2 com.
	27.5%	25.0%	35.0%	16.7%	36.8%	22.2%	16.7%
	13.9%	22.6%	16.7%	5.9%	24.9%	5.0%	11.3%

Amongst the hunger elimination and poverty alleviation measures listed above, the indirect measures (capital lending, construction of infrastructure, training) have been applied on a larger scale (a greater number of communes) and with a higher percentage of beneficiaries (households). These measures have created a stable and firm foundation for the development of households as well as communes, as they have raised the economic and social capabilities of households, individuals and communities. However, there has been not enough data to determine how many among such households are poor or how many poor people have gained benefit so far, to assess any negative impact of the above mentioned measures.

The measures in direct support of poor people (exemption or reduction of school fees, medical charges, allowances... ) have been applied to a smaller number of people. They are characterised mainly by direct relief but have not created a firm and stable foundation for hunger elimination and poverty alleviation.

One of the foremost measures which the Government, as well as private and foreign, has used for the development of the peasant household economy, elimination of hunger and reduction poverty is the lending of capital to peasant households. As mentioned above, 33 of the 40 surveyed communes have applied this measure.

The major lending sources include:

- The Bank of Agriculture and Rural Development (VBA), which lends at a monthly commercial interest rate of 1-1.2%.
- The Bank for the Poor (VBP), with an interest rate of 0.9%.
- The People's Credit Fund (PCF), with an interest rate of 1.5%.

- A number of the State Development Programmes such as the programme for greening unused land and bare hills (Programme 327), the job-generation programme (Programme 120), etc., with an interest rate of 0.8%.
- The development projects of the State and International Organisations providing loans through social and mass organisation such as the Women's Union, the Peasant's Association, the War Veterans' Association, etc., with interest rates of 0.8-1.0%.
- A number of development projects funded by international organisations, with an interest rate of 1.2%.

Besides these, there are other lending sources such as the Industrial and Commercial Bank, the joint stock commercial banks, which are, however, not common.

Except for the Bank for the Agriculture and Rural Development which has a network of branches in all districts and provides loans on a broad scale mainly under a commercial mechanism (with property mortgage, commercial interest rates), the other lending sources have provided loans with more or less preferential treatment through low interest rates, the mechanism of trust for loans. For poor people, such preferential treatment is positive and necessary. However, most of such loans are small (not more than 1 million VND for a household) and short-term (not more than 1 year). Therefore, they have not exerted strong and sustainable impact upon hunger elimination and poverty alleviation.

In the survey, the following 4 indexes were collected:

- The number of communes borrowing capital according to sources against the total surveyed localities.
- The rates of commune capital borrowing in the total number of surveyed communes.
- The ratio of households being lent capital against the average number of households in a commune.
- The average money volume lent to a household (million VND).

Survey data shows that the Bank of Agriculture and Rural Development and The Bank for the Poor have operated in almost all localities. Lending capital through social organisations is also common (Prevalent in about half of the communes in all regions). The provision of loans by development programmes has been effected in one fifth of the surveyed communes. The people's credit fund, a form of credit co-operative newly set up throughout the country over the past three years, are not yet in full operation in the surveyed communes. Finally, only 3 communes have international development projects which support rural credit.

The number of households borrowing capital from the Bank of Agriculture and Rural Development accounts for the highest percentage (20-25% of the total households). Meanwhile, the Bank for the Poor has lent capital to only about 10-15% of the households in communes where it has operated. The percentage of households borrowing from projects managed by social organisations is fairly high, about 15-20% of the households in communes.

Most of the loans are small, with the largest amount being 2 million VND a household and the smallest amount being 200,000 VND.

Excluding the lending among family members, relatives and friends, there exist individual

money lenders in 18 of the 40 surveyed communes, including 11 communes in Nghe An (55% of the communes) and 7 communes in Ha Tinh (58.3% of the communes). According to geographic region, the mountainous has the lowest percentage of communes with individual money lenders (21.1% of the communes); the midlands has the highest percentage (88.9% of the communes), and the delta, 50%.

The interest rates set by individual lenders are higher than those set by the State lending sources and mass organisations, which fluctuate at around 2 to 3% a month, depending on business seasons, borrowers and demand.

It can be remarked that the small rural credit market is diversified in its lending sources. Such lending sources have not yet met the demand for loans because their operations have not yet spread to all communes, the percentage of borrowing households is low, the loan amounts are small, and the term is short. The capital-lending activities lack the necessary co-ordination because each lending source has its own purpose and lending mechanism.

### **11/ People's participation in social activities:**

Social and mass organisations in Vietnam are characterised by their active role in social and community activities. The social organisations have been set up with the guiding principle of uniting all social groups for the achievement of community and national development. Each social group (according to age, gender, occupation, common interest...) has its own organisation: youth, women, elderly, children, peasants, war veterans, gardeners...). If mobilised and given the necessary resources, such organisations can effectively contribute to acceleration in the process of community development, through the management and supervision of projects, the organisation of training and technical training courses. The participatory approach can be fully achieved with an active role of mass and social organisation in the mobilisation of development and poverty alleviation projects. This can be clearly seen through the activities of the rural credit systems referred to in the above section. In almost all surveyed communes, the major social organisations such as the Peasant's Association, the Women's Union, the Youth Union, the Veterans' Association have attracted large numbers of people and have carried out political, social and economic activities, particularly mutual assistance activities in their social and economic life. In addition, professional associations such as the Gardeners Association have been organised in 50% of the communes, humanitarian organisations such as the Red Cross in 72.5% of the communes or the Elderly Society in 90% of the communes. On average, the Peasants' Associations have members in 80% of the households, Women's Union in 67%, Youth Union: 31%, the Elderly Association: 37%, Veterans' Association in 18%, Red Cross in 21% and Gardeners Association in 7% of the households.

### **12/ Budget in the surveyed communes:**

The commune is the lowest level in the administration system in Vietnam. The operation of the commune administration is reflected through the financial system and budget of the commune, namely, through the volume, revenue and expenditure structure of the commune budget.

There is a marked difference between communes in budget revenue. If the revenue is almost equal to the expenditure, the total revenue of the commune against the total per-capita revenue in communes would be as follows (Table 13).

**Table 13: Comparison between the total revenue and the commune's per-capita budget revenue (% , the average of 40 communes = 100% )**

	Total	<i>By province</i>			<i>By region</i>		
		Bac Kan	Nghe An	Ha Tinh	Mountainous	Midlands	Delta
Total revenue of commune's budget	483.7 mil. VND = 100	24.4	139.7	84.1	43.1	130.8	166.8
Budget revenue per capita	89.000 VND =100	34.8	111.2	93.2	58.4	98.7	126.7

The budget revenue of a commune in Nghe An is 5.7 times higher than that in Bac Kan; of a delta commune is 3.9 times higher than that of a mountainous commune. According to the per-capita revenue, the difference between communes is not so great: It is 3.2 times higher in a commune of Nghe An than that of a commune in Bac Kan; or 2.2 times higher in the delta than in the mountainous areas.

In the current financial system of Vietnam, communes are entitled to retain 10% of the collected amount of agricultural tax, 90% of the animal slaughtering tax, 50% of the land and house tax, 20% of the industrial and commercial taxes, 100% of fishery and salt-production taxes, and 100% of fees and charges prescribed by law. After the settlement of the final accounts of the budget, communes are provided with the necessary amount of funds to make up for over-spending which has resulted in a budget deficit. In the 40 surveyed communes, this was about one third of the commune budget (district, province). The figure for the mountainous communes is about one half, and in particular for Bac Kan it is 60%. This proves that the surveyed communes are very poor.

The commune budget is spent largely on basic public services such as primary education, health care, infrastructure construction and social activities.

However, with a small budget, most of the expenditure in the commune budget is for wage payments to managerial officials, medical and educational personnel. More than 20% of the budget is spent on wage payments to managerial personnel, 8% for education, 3% for health care, 25% for physical education and sports, 10% for social activities. Investment in the construction and maintenance of infrastructure in the commune accounts for about 30-40% of commune budget expenditure. Of course, there is a difference between communes in their expenditure structures.

### **2.3. Survey results at household level**

#### **1/ Characteristics of the surveyed households:**

The interviewed household heads fall in different age groups, but most of them aged from 30 to 50 (accounting for 61.9%), who are “ in their prime ” in term of their strength as well as business experiences.

**Table 14: Age of the household head**

<b>Age</b>	Number of households	%
60 +	128	12,7
50 - 59	180	17,9
40 - 49	315	<b>31,3</b>
30 - 39	308	<b>30,6</b>
Under 30	74	7,4

Among the 1,000 surveyed households, the number of households of Kinh ethnic majority makes up the leading percentage (75.5%), while other ethnic groups account for small percentages: Tay 16.2% ( residing largely in Bac Kan province); Thai 3.6%; Dao 1.7%; Kho Mu 1.7%. Though these figures do not give full representativeness, they shall serve as references for the analysis and specific comparison of living standards of different ethnic groups in localities.

Almost all household's heads are primary and secondary graduated. About a half of household heads have completed 7th grade and more than 1/5 have completed 10th grade.

Approximately 80% of household heads have education level at 7th and higher grades. Only 1.7% of household heads are illiterate. The rest 17.7% of the surveyed household heads have the education level from first grade upto 6th grade.

**Table 15: Education level of the household head**

Grade	Illiterate	Grade (1-6)	Grade 7	Grade (8-9)	Grade 10	Grade (11-12)	Intermediate and university level	Total
Number of household	17	177	458	63	224	51	14	1004
Percentage (%)	1.7	17.6	45.5	6.3	22.3	5.1	1.4	100

By main occupation, 81.7% of the household heads are farmers; 11.1% are retired old-aged. The percentage of household heads having other occupations than agricultural is insignificant; it is only from 0.5% to 2.4% (handicrafts 0.5%, trading and services 1.7%, and state employees 2.4%).

The average household size (the number of persons in a household) is 5.5 persons. This size is typical in Vietnam's northern and central countryside, largely with households of from 4 - 5 - 6 persons (accounting for 68.2% of the total 1,000 surveyed households). The midland households have the largest size (5.6 persons/household), while it is only 5.2 persons/household in the delta communes. The poor households are also characterized by a larger size (5.6 persons/household) than the middle-class households (5.4 persons) and the better-off or rich households (5.3 persons). This has been confirmed through various studies on the rural poverty: one of the cause of poverty is the large-size family with too many children.

**Table 16: Average household size**

Number of persons in a household	1	2	3	4	5	6	7	8	9	10+	Total
Number of households	2	24	69	202	256	230	112	63	32	16	1006
%	0,2	2,4	6,9	20,1	25,4	22,9	11,1	6,3	3,2	1,6	100,0

In average, each household has 2.9 persons in working age. There is no significant difference between poor and other households. In a poor household, there are 2.8 persons in working age, while in a middle household: 2.8 and in a rich household 2.9 persons.

The number of people in working age accounted 52.7% of household's population; that means each breadwinner should earn for feet himself and one another person. The proportion between working population and not-working are different by living standards: in a poor household it is 1/1, in a middle household: 1/0.93 and in a rich household: 1/0.83.

The number of households having from 2 to 4 eligible labourers has accounted for up to 82.7%.

**Table 17: Number of people in working age in a household**

The number of labourers	0	1	2	3	4	5	6	7-9	Total
The number of households	14	37	471	203	158	76	37	10	1006
Percentage ( % )	1.4	3.7	46.8	20.2	15.7	7.6	3.7	1.0	100

## **2/ Economic situation of surveyed households:**

### ***a/ Economic diversification:***

The purely agricultural nature of the households economy in the surveyed communes can be clearly realised through this. About 705 of the 1,000 surveyed households remain to be purely agricultural ones. The number of households engaged in non-agricultural occupations such as trading, service provision, handicraft production, has accounted for a small percentage (0.7%).

The agricultural households having members being State officials or employees (including the retirees) make up 14.8%. Besides, 3.8% of the households live entirely on being State

employees. These two households groups live mainly in suburban communes of cities, provincial capitals, district town

The number of households engaged in agricultural production and trading-service activities has accounted for 7.5%, which tend to gradually separate themselves from the group of purely agricultural households, diversify rural occupations and approach non-agricultural economic activities in the countryside.

**Table 18: Household types by main occupation of the household members**

Type of HH	Number of HH	%
1. Purely agricultural	<b>698</b>	<b>69,8</b>
2. Purely trade and services	7	0,7
3. Purely industry & handicrafts	7	0,7
4. Purely state services	38	3,8
5. Farming + trade, services	75	7,5
6. Farming + industry, handicrafts	10	1,0
7. Farming + state employees	<b>148</b>	<b>14,8</b>
8. Trade, services + state employees	5	0,5
9. Farming + trade, services + state employees	10	1,0
TOTAL	-----	----
	1.000	100,0

**b/ Land resources:**

Land is the most important resource and survival conditions for the peasants. Though various policies have been worked out to encourage and create conditions for rural development along the direction of diversification of production and business lines and reduction of the number of purely agricultural households, land has, so far, still played the most important role products. Therefore, the indexes on the land being exploited by households are important for understanding the real situation of economic development in a rural locality. Table 19 provides the average land area of each households.

Panoramically, 94% of the surveyed households have land for annual plant cultivation with an average of 3,795m<sup>2</sup>/household; 30% have forestry land; 27% have land for perennial tree planting with the average of 3,523m<sup>2</sup>/household.

It can be realised that the arable land area for each household is not high, just about 1/3 ha for a family with 5.4 persons. This figure is very close to the data obtained from commune survey questionnaires. Moreover, the surveyed provinces are not categorised as regions with high rice yield as those in the Red River delta. The potentials for intensive farming, crop increase, yield and output raising here (the 3 surveyed provinces) have been exhausted.

**Table 19: Household's land**

Land category	Land area owned by the household (m <sup>2</sup> )	Land area leased by the household in (m <sup>2</sup> )	Land area leased by the household in (m <sup>2</sup> )	Total land area used by the household (m <sup>2</sup> )
Annual crop land	3.643	1.890	1.724	3.795
Perennial crop land	3.591	4.250		3.523
Forestry land	36.369	16.883		27.480
Garden and residential land	1.507			1.507
Ponds, lakes, water surface	1.875	4.731	1.606	2.363
Other land categories	4.253	11.503		4.950
Total	13.860	5.245	2.185	16.093

Survey data show that the number of households borrowing or renting arable land for annual plant cultivation makes up 13%. Meanwhile the percentage of households leasing or lending their land (mainly land for annual plant cultivation) and water surface is very low (1-2%).

In the land area under annual plants, there is no marked difference between household groups including groups with different living standards. It can be realised that the arable land area in the countryside is not the most important factor determining the living standards of peasant households. Results of almost all studies on agriculture, peasantry and rural development in recent years in Vietnam have confirmed that the purely agricultural households are usually difficult to get rich without diversifying their production and business lines and developing non-agricultural ones.

The borrowing or renting of land for cultivation is not very common, only by several percents of the surveyed households in Bac Kan and by 15% of the surveyed households in Nghe An and Ha Tinh provinces, with about 1,000-2,000 m<sup>2</sup> each. This also shows the extent of labour division and social disintegration in such localities. This may be the initial sign of land concentration in the process of developing the household economy under the market mechanism.

### **c/ Food cultivation**

The 1997 average food output (paddy and subsidiary food equivalent in paddy) of the surveyed households reached 2,151 kg/household. With the household size of 5.4 persons /household as mentioned above, the average per-capital food ration is about 400kg in 1997. With such output there will not be any households falling into food shortage. Yet, in reality the food output of households varies from region to region. For instance, households in Ha Tinh in average got 1,707 kg/household, in Nghe An: 2,437 kg and in Bac Kan: 2,104 kg. The highland households (making up more than half of the surveyed households) achieved only 1,740 kg/household while midland and delta households got 2,600

kg/household. Particularly, women-headed households had lower food output than that of men-headed households: 1,815 kg/household against 2,169 kg.

A section of the surveyed households has suffered from food shortage. Survey results show that 21.9% of the households have suffered from food shortage (for several months between crops). This percentage correspond to the of poor households (21.1%) determined in survey samples. According to geographical areas, Ha Tinh has the highest percentage of households suffering from food shortage (29.2%). The figure is also high in high-land regions (30.7%) and among women-headed households (30.8%).

Excluding 21.9% of the households suffering from food shortage, 43.7% of the households got enough food and 34.4% had surplus food for sale in 1997 with the average of 1.037 kg being sold by each household. This has reflected the disintegration among peasant households as well as the level of development of the agricultural commodity market in surveyed rural localities.

**d/ Other economic activities:**

The traditional husbandry products of the northern rural areas are manifest through surveyed households. Table 20 below shows types of domestic animals raised by households. Most common are 6 types with the percentage of households raising them and the average number of animal head per households as follows:

**Table 20: Animal husbandry of households**

Type of animals	Percentage of households having been raising	Average number of animal heads per HH
Cattle	33,1	3,2
Horses	0,5	2,0
Buffaloes	46,9	2,0
Pigs	93,7	3,5
Poultry	92,3	40,0
Goats, deers	5,2	7,0

The percentage of households managing forests (natural forests and planted forests) and the forest acreage varies according to geographical areas. For instance, with regard to planted forests, Bac Kan has 52.9% of the households with forests, Nghe An: 20.2% and Ha Tinh: 7.6%.

Having or not having forests and the forest acreage have not brought about any big change in the living standards of households. Perhaps, forestry and forest products have so far not yet contributed much to the cause of poverty reduction in the countryside. Because the main forest product is firewood, more than 90% of which are for consumption by households. Two other kinds of products of high value, the sawn wood and other forest products are harvested by only few households though they are sold in fairly large quantities.

It can be realised that both the percentage of households with incomes from forest products and their income amounts are relatively modest, being only part of the households' total revenues from cultivation, husbandry and other economic activities.

The development of non-agricultural crafts in rural areas is mainly through the stepping up of cottage-industrial and handicraft production as well as trading and services. Yet, in surveyed localities, the percentage of households having members engaged in cottage-industrial and handicraft production activities (bamboo weaving, textile, production of construction materials, smithery, mulberry, etc.) is very low. Only 6.9% of the households have 2.5 persons on average engaged in such production activities.

**Table 21: Number of people working in cottage industry and handicrafts**

	Percentage of HH having activities	Number of people engaged in
Number of HH and people	6,9	2,5
Of which: Male	6,3	1,5
Female	4,9	1,5

Unlike husbandry, cultivation or forest products, the cottage-industrial and handicraft products are of high commodity nature because most of them (90%) are turned out for sale. In 1997, 6.9% of the households earned more than 4 million VND each from the sale of their cottage-industrial and handicraft products. The figure is fairly high but only among 6.9% of the surveyed households. Poor households engaged in cottage-industrial and handicraft production have earned a modest sum, only equal to about 1/5 of the medium households and 1/8 of the rich households. Clearly, the development of such production lines requires investment capital, labour and professional skills, which the poor households can not easily get.

**Table 22: Earnings from cottage industry and handicrafts**

	Percentage of HH having income	Average income of one HH in 1997 (VND)
<b>Total</b>	<b>6,9</b>	<b>4.086.521</b>
<i>By HH's living standards</i>		
Poor	5,2	886.363
Middle	8,1	4.312.200
Rich	4,6	7.076.250

As compared to cottage-industrial and handicraft production, trading and service activities have attracted a larger number of households : in average 12.6% of the households. Yet, the number of people from such households is smaller, in average 1-2 persons/households (with more female than male labourers).

Households' earnings from trading and service activities can be calculated easier. In 1997, 12.6% of the households engaged in trading and service activities in average earned 3.5 million VND each, nearly equal to the amount earned by 6.9% of households engaged in cottage-industrial and handicraft production (4 million VND/households/year).

**Table 23: Households' earnings from trading and service activities in 1997**

	Percentage of HH having income	Average income of one HH in 1997 (VND)
<b>Total</b>	<b>12,6</b>	<b>3.460.793</b>
<i>By HH's living standards</i>		
Poor	5,7	3.000.000
Middle	12,1	2.865.333
Rich	22,5	4.747.692
<i>By region</i>		
Mountain	8,1	2.210.697
Midland	15,0	3.776.666
Delta	19,3	4.296.226

The economic development situation of the localities in the surveyed areas (through household survey) can be outlined in brief as follows. The purely agricultural content of the economic structure of the households remains high. The cultivation and husbandry products are of traditional characters. The most important input resource, namely land, is very limited. The yield is still low. Such non-agricultural production lines as cottage industry, handicrafts, trading, services represent low percentage and with small scale.

### **3/ The living conditions of households**

#### **a/ Housing**

The structure, types and areas of houses of the surveyed households are shown in the Table 24 below:

**Table 24: Types of HH's housing**

Type of dwelling	% of HH	Average area of a HH (m <sup>2</sup> )
Multi-storey	0,6	83
One-storey permanent (brick-house)	16,7	70
Semi-permanent (wood house)	75,4	66
Temporary (straw/leaf roofed house, tent)	7,3	50

#### **b/ Clean water**

Only about 10% of the households are still using water from ponds, lakes, rivers, streams or canals for their daily needs (it is 15% in mountain communes and Bac Kan). Water from

hand dug, deep drilled wells have not yet been qualitatively tested; hence, it cannot be categorised as clean water in its true meaning.

**Table 25: Drinking water sources of households**

Water sources	Percentage of households
Private piped	2,4
Public standpipe	1,3
Hand dug well	76,1
Deep drilled well	16,2
Pond, lake, spring, river	8,2
Other sources	1,3

*Note: Some households use more than one water sources, therefore total summ of percentages is more than 100%.*

### **c/ Latrines**

Regarding clean water and latrines in rural areas, much remains to be done. The surveyed data show that localities in the surveyed areas are no exception. The twin-compartment latrines which were once considered the model toilet for the countryside, have been used only by nearly 1/ 2 of the households. Simple privies are still very common, particularly in the mountain regions or in Bac Kan. 9.9% of the households do not have their own latrines (13.8% in Nghe An; 15.4% in mountain communes) and 4% have built their privies over fish ponds (it is 10.9% in delta communes).

### **d/ Lighting energy sources**

The majority of households have used electricity from the national grid (92% of the households in Nghe An provinces). Yet, the national grid electricity has not yet been accessible to 12% of the households in mountain communes, which have to used electricity generated from mini hydro-electric power generators or accumulators (it is 57% in Bac Kan province). Some 12% have used kerosene for lighting (27.6% in Bac Kan province).

### **e/ Home appliances and utensils**

Most households have 2 or 4 mosquito nets and 1 to 3 electric fans. 13 - 15% of the households have sewing machines and electric cookers. Worthy of note is that the percentage of households possessing audio-visual equipment is fairly high: 41.1% have colour T.V., hi-fi radio compacts and telephones, which are considered high-class appliances, can be affordable to about 1% of the households, largely in provincial or district capitals.

Unlike home appliances and utensils, mechanical production instruments are possessed by small percentage of households. Only 12.4% have rice threshers, 6.5% have mechanical pumps and rice huskers; only 3.2% have small tractors (under 12 horse powers). This shows that the investment in agricultural production in surveyed localities is still limited.

**Table 26: Percentage of HH having home appliances and utensils**

Home appliances	% of HH having	Production machinery	% of HH having
Mosquito net	98,8	Large tractor (over 12 HP)	0,7
Electric fan	79,5	Small tractor (under 12 HP)	3,5
Freezer	1,2	Water pump	6,5
Rice cooker	15,4	Motor rice thresher	12,4
Sewing machine	12,8	Rice milling machine	6,4
Colour television	41,1	Feed milling machine	2,9
White-black television	20,4	Motor insecticide pump	0,6
Radio cassette player	43,6	Generator	3,9
Video player	5,5		
Stereo set	1,1		
Telephone	1,0		

#### **4/ Education:**

The number of school-attendants in households is an important index showing people's care for education. Survey data give a positive picture. Almost all households have school-attendants, with the average of 2 each.

85% of the school-attendants are general education school pupils, including 43% primary school children, 38.5% the junior-high school pupils and 13.5% senior-high school pupils and the remaining 5% are students of intermediate vocational schools, universities, colleges or job-training institutions.

**Table 27: The number of school-attendants in a household.**

	Number of school-attendants per HH
Total number of school-attendants	1,99
<i>Of which: Male</i>	1,06
Female	0,90
<i>Number of students:</i>	0,86
Primary school	
Lower secondary school	0,77
Upper secondary school	0,27
College	0,04
University	0,02
Vocational school	0,02

The number of school-age children (from 6 to 15 years old) having not going to school is very small, only 27 (16 girls and 11 boys) in 22 of the total 1,000 households.

Among such 27 children, 11 have never gone to school (4 boys and 7 girls), 11 others dropped out of primary school (4 boys and 7 girls) and 5 others (3 boys and 2 girls) have quitted their schooling after finishing their primary education.

**Table 28: The causes of non-school going by children.**

<b>Causes</b>	<b>% of responses</b>
Needed for work at home/field	18,2
School is too expensive	40,9
Bad results at school	18,2
School is too far away	9,1
School is too hard to reach (bad roads, missing bridges, etc.)	4,5
Child does not need to learn more	9,1
Other	27,3

## **5/ Health and medical service**

According to interviews with households, at present 18.5% of the households have diseased/ chronically ill persons. The people's accessibility to and trustworthiness on local medical stations can be seen through the following data:

**Table 29: Places where people go for medical examination and treatment**

	<b>% of responses</b>
Commune health clinic	49,0
Inter communal clinic	4,4
District hospital	41,1
Provincial hospital	18,9
Central hospital	2,2
Pharmacy	2,2
Home of person consulted	5,2
Traditional healer	0,5
Self-treatment at home	8,5

*Note: One person may have more than one response options.*

Besides, over 10% of the households have made self-treatment at their homes or bought medicines at the doctors' prescriptions. They have reasoned that they felt unnecessary to go to hospital for examination, they wanted to save the money, or they did not want to travel for a long distance.

## **6/ Living standards self-evaluation and impacts of the poverty alleviation**

**measures :**

*a/ Living standards self-evaluatuon of the surveyed households:*

According to self-evaluation of their living standards by surveyed households, the survey gives the following results:

<b>Living standard</b>	<b>% of HH</b>
Good	15,7
Middle	64,5
Poor	17,8
Very poor, hungry	2,0

Worthy of note is the percentages of poor and hungry households. Generally, 19.8% of the households thought they are in the category of poor and hungry families. This is very close to the percentage evaluated by the commune authorities (19.3%).

**Table 30: Percentage of households categorized as “poor” or “hungry” by commune authorities**

	Poor	Hungry	Total
Total	18,0	1,3	19,3
<i>By province</i>			
Bac Kan	17,2	2,0	19,2
Nghe An	15,4	0,4	15,8
Ha Tinh	22,9	2,3	25,2
<i>By region</i>			
Mountain	21,5	1,9	23,4
Midland	15,0	1,0	16,0
Delta	13,5	0,4	13,9
<i>By sex of HH's head</i>			
Male	17,1	1,4	18,5
Female	23,1	-	23,1
<i>By ethnic group</i>			
Kinh	15,4	0,8	16,2
Tay	15,4	2,5	17,9
Nung	50,0	-	50,0
Dao	23,5	-	23,5
Mong	100,0	-	100,0
Kho Mu	70,6	5,9	76,5
Thanh	50,0	50,0	100,0
Thai	44,4	2,8	47,2

It can be realised through this survey that the percentage of poor and hungry households is often higher in communes of Ha Tinh province (25.2%), among mountain households (23.4%), households with women as their masters (30.8%) and among the ethnic minority households.

Better-off and rich households are seen largely among households engaged in agricultural production, trading and service activities (36%), purely State employees' households

(21.1%). Only 11.7% of purely agricultural households are better-off or rich.

According to their self-assessment the living standards of the majority of population have been bettered as compared to two years ago. Only 2.3% of the households said their living standards had been lowered.

- Much better : 10.6%
- Better : 73.9%
- The same : 13.1%
- Worse : 2.3%

However, these figures vary according to households groups. The percentage of households saying that their living standards were “the same” and “worse” in the mountain communes is 18.7%, in Ha Tinh: 17.3%; and among women-headed households: 26.9%.

The self-claimers of their “much better” living standards over the past two years include households which combine agricultural production with trading and service activities (17.3%) and households which combine agricultural production with being State employees (12.2%).

On major cause of the better living standards, households gave their opinions presented in Table 28.

**Table 31: Major causes of the better living standards**

Cause	Percentage of response	Made the living standards better
Climate	38,4	37,5
Change in h'hold labor resources (more)	29,8	28,7
Change in capital (more)	46,0	44,9
Change in land (more)	15,9	15,2
Implementation of new seeds, new technology	68,9	68,0
New public infrastructure	33,9	33,3
Governmental support through development project, training, afforestation and rural credit projects	15,4	14,6
Support from other h'holds/outsideers	13,3	12,6
Other	4,5	3,2

According to this result, most of the cited causes are positive (making the life better). The number of negative causes (making the life worse) only accounts for around 1%.

Among the positive causes, the “transfer of new technologies” (new seeds, breed and farming techniques’) was mentioned by 68.9%, which was followed by the cause of “having more capital” (46%), favourable weather (38.4%), with new infrastructures (33.9%). These are good suggestions for the future implementation of the poverty alleviation program.

*b/ Impacts of the programme for hunger elimination and poverty alleviation.*

Over recent years, the rural population, particularly poor people, have more or less enjoyed supports/benefits from the Government's hunger elimination and poverty alleviation programme. However, not all households in localities have enjoyed such benefits equally.

**Table 32: Benefits enjoyed by households from the hunger elimination and poverty alleviation programme**

Benefits	% of HH getting benefit
Credit loan	27,0
Fee exemption for primary school	2,8
Fee exemption for health care	6,6
Free school supplies	1,5
Relief fund for pre-harvest starvation and disasters	1,0
Free land	1,0
Training	4,2
Cash transfer	0,8

As seen in the above Table, about 1/4 of the households (higher than the percentage of poor and hungry household) have received capital support from the programme. The percentage of such capital-borrowing households is highest among the poor households (42.9%), in Bac Kan (40.9%) and the mountain communes (33.6%).

In addition, a number of other households have been given free medical treatment (6.6%), training in production techniques (4.2%), school fee exemption or books and notebooks to their children. The percentage of households being given support in cash or famine relief is very low (around 1%). This is truly correct with the strategic guiding principle of the hunger elimination and poverty alleviation programme, that is "giving a fishing rod is better than giving a string of fish".

### **3. CONCLUDING REMARK**

The results of the pilot survey conducted by MIMAP-Vietnam with the aim to test the proposed methodology of rural poverty monitoring show the followings:

- The proposed two-level (community and household) monitoring system is welcomed by both governmental authorities who are responsible for poverty alleviation program and local people, including local government officials and mass organisations practising actively anti-poverty measures. The data collected and processed could be used for evaluation of impacts of macroeconomic policies on micro levels (community and household), as well as for designing and implementing community self-managed poverty alleviation activities.

However, the conducted survey showed also that the monitoring system should be extended to higher administrative levels (district and province), because the process of policy making and implementation goes through all administrative levels, from national, provincial, district to commune, and after that to households and individuals, it is needed to develop a monitoring system integrating all these levels. That means that the research project should work more to develop a system of indicators, flows and formats of information, that covers all levels: national, provincial, district, commune, household and individual.

- The proposed set of indicators in general is suitable for community and household levels. There are few indicators which cannot be gathered or meet difficulties with information collection. They should be further elaborated and readjusted. They are the indicators that require an exact quantitative measurement. The indicators reflecting nutrition of households or individuals belong to this category.
- Since the poverty assessment based on a basic needs approach, it is necessary to define more clearly and to measure some basic needs which are different toward gender, age, economic activity and other characteristics of household's members. It is to be defined an operational and relevant age/sex classification of household members in view of some specific non-monetary indicators. Then, the research should formulate and test individual indicators specific to age/sex groups, particularly on health, nutrition, education, literacy, employment, etc. The ability of different groups of people to be satisfied with several categories of needs should be measured. This means designing questionnaires filled at the individual level within the household. Recommendations based on individual poverty indicators could be elaborated in order to improve public policies concerning different social groups. Not a lot of research work has been done at the individual level, and the MIMAP team could come out with extremely original results on this important dimension of poverty.

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