

## Off-Farm Business as a Poverty Reduction actor in Vietnam's Rural Areas

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# **OFF-FARM BUSINESS AS A POVERTY REDUCTION ACTOR IN VIETNAM'S RURAL AREAS**

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## **1. INTRODUCTION**

The development reality in Vietnam shows that in comparison with agricultural activities, off-farm activities can create more jobs and generate higher incomes for the rural population. Wherever off-farm business is developed, poverty rates are lower and the living standard of the population is higher than in areas with only agricultural activities. In particular, in the so-called 'craft villages', where most households are engaged in off-farm activities, poor households have more opportunity to work and generate a higher income. Engagement in household crafts or the establishment of off-farm businesses is the first step of rural industrialisation. Household business and small-medium enterprises play the role of active actors in the process of poverty reduction in rural areas.

However, not every locality and not every household can create and run effective off-farm activities. Not all villages can become craft villages or industrialised areas. Besides the positive impacts of industrialisation on poverty reduction and job creation, the development of off-farm business in rural areas has unwanted negative influences on the quality of life and the environment.

There have been several studies on the development of off-farm business and craft villages in rural areas. These studies are conducted from different points of view, mostly from the role of crafts in rural development, from the technology of rural crafts and from the environmental impacts. However, the link between rural off-farm business and poverty reduction has not been studied in depth.

The objectives of this study are, first of all, to review the present development trends of off-farm business in rural areas, and to analyse the characteristics and impacts of rural off-farm business on the economic and social and environmental changes. Close attention is paid to the impact on the lives of the poor. Moreover, this study aims to elaborate policy-oriented recommendations on the development and management of rural off-farm business. The principal methodology is to combine the review of available previous studies, analysis of secondary data and statistics with the additional case studies. The study particularly focuses on quantitative household surveys and qualitative in-depth

interviews with representatives of governmental agencies, communities, households and individuals in some selected craft villages and a comparable agricultural village.

Our study uses two main data sources. The first, to review the development of rural off-farm business in general, we use data presented in some studies, which were based on nation-wide surveys and mapping of crafts in all provinces<sup>1</sup>. Secondly, to study more deeply the link between the development of rural crafts, off-farm business and poverty reduction, we selected four representative craft villages and one agricultural village for case studies. These selected villages are in two provinces in the Red River Delta, where craft activities are most developed in the country. Two of the craft villages, one producing paper and another brewing alcohol, are in Bac Ninh province, which is well-known as an area with a high density of craft villages. The other two craft villages, one producing bamboo and rattan products and the other weaving silk, were selected and are in Ha Tay province, which is the province with the highest number of craft villages and handicraft workers in the North of Vietnam. One purely agricultural village was selected in the same region, with the aim of comparing villages with and without off-farm business. Quantitative and qualitative methods of analysis were conducted based on the collected data.

This paper includes the following seven parts. After the Introduction, Section 2 presents an overview of poverty reduction in Vietnam, the needs of job creation and income generation for the poor, and the governmental policies for the development of off-farm business. In Section 3, using data from the nation-wide surveys, the paper analyses the development of off-farm business in the last decade. The craft villages are paid particularly attention, since they are a special form of concentration of off-farm businesses in Vietnam's villages. Section 4 analyses the general contribution of the rural off-farm business to economic growth, rural employment and poverty reduction. In

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<sup>1</sup> The study refers to the results of the following projects:

- "The Study on Artisan Craft Development Plan for Rural Industrialization in the Socialist Republic of Vietnam" carried by Ministry of Agriculture and Rural Development and Japanese International Cooperation Agency (JICA). The project was implemented from 2002 to 2004, identifying 2971 craft villages, mapping, studying cases and selecting 3 provinces to piloting improvements in the business environment of craft villages.

- "Research on the scientific and factual basis for the development of policies and measures to solve environmental problems in craft villages in Vietnam" in the National Research Program on "Environmental Protection and Natural Disaster Prevention" coded KC-08. This project was carried out between October 2001 and December 2004 by the Institute of Environmental Science and Technology (VENETCO [2004]).

- 'Vietnam – Regional Environmental Management for Traditional Handicraft Villages': This study was completed by the Korean Environment Institute in December 2004.

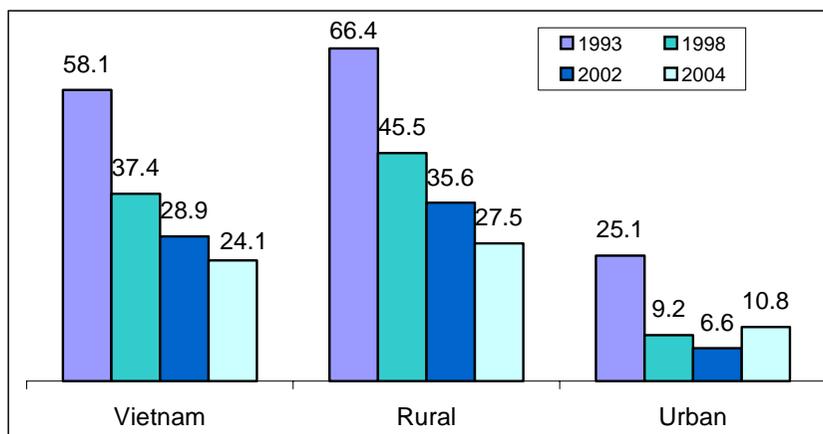
Section 5, based on the results of the case study in 5 representative villages, we examine the link between the development of off-farm business, household income and people's quality of life. Section 6 examines the impacts of the development of off-farm business on villages' environment and people's health. Finally, the Conclusion, offers some comments and recommendations on the policies of poverty reduction and the development of off-farm business are presented.

## **2. POVERTY REDUCTION AND POLICIES FOR THE DEVELOPMENT OF OFF-FARM BUSINESS IN VIETNAM'S RURAL AREAS**

### **2.1 Poverty reduction**

In the last decade, Vietnam has made impressive progress in reducing poverty. On one hand, reforms in socio-economic policies have dramatically changed the Vietnamese economy and improved the living standards of people. On the other hand, the Government and society in general has paid a great deal of attention to poverty reduction, and therefore many policies and measures have been taken for this task. During the past decade, the size of Vietnam's economy has more than doubled, whilst its poverty rate has halved. According to the Vietnam Living Standard Surveys, the poverty rate dropped from 58.1% in 1993 to 37.4% in 1998, 28.9% in 2002, and 24.1% in 2004 (see Figure 1).

**Figure 1: Changes of poverty rate in the period of 1993-2004**



*Source:* Government of Vietnam, 2005, p.8.

The number of poor decreased from 40.4 million persons in 1993 to 19.7 million persons in 2004. Vietnam is considered as one of the countries with the best poverty reduction practices in the world. The poverty rate of rural areas reduced from 66.4% in 1993 to 27.5% in 2004. Despite this, the poverty rate in rural areas is still high. About 80% of Vietnam's population are located in rural areas; therefore most of the poor are farmers (The Government of Vietnam [2005]).

Poverty reduction faces certain limitations and remains a major concern for the Vietnamese Government. There is low sustainability and high risk of poverty reoccurrence especially if there are floods or storms in an area. There exists an unbalanced poverty reduction rate between different regions. The poverty rate in most remote, mountainous ethnic minority group areas is high. Implementation of priority policies cannot cover all real poor households in a number of communes and precincts. In addition, the gap between the rich and the poor is yet to narrow and many poor people have yet been able to enjoy basic social services such as health care, study, travelling, arts and sports.

In 2005, based on effective results in poverty reduction during the 2001-2005 period, the Government approved new and higher poverty line for the 2006-2010 period and agreed to spend 60,000 billion VND to implement the National Target Programme on Poverty Reduction over the 2006-2010 period with the key viewpoint that poverty reduction work will be carried out in a more comprehensive, more equitable, sustainable and integrated manner. Over the next period, besides the target of reducing the number of poor households nation-wide to under 15% by 2010, the program will focus efforts on helping any people in those areas having difficulties and the high rate of poor households, to boost production in combination with improving living standards for the poorest households. This is to limit the widening of the income gap and living standards between the urban and rural areas, between the plains and the mountainous areas and between the rich and the poor. Favourable conditions will be provided for poor households following two policies. The first policy is to support production by providing soft loans, cultivated land for ethnic minority households, vocational training and effective methods of agriculture, forestry and fishing in combination with building sufficient infrastructure such as irrigation, electricity supply and safe water works for poor communes and areas. The second is to help poor people gain access to basic social services in terms of health care, education of children, housing and cultural activities (MOLISA [2004]).

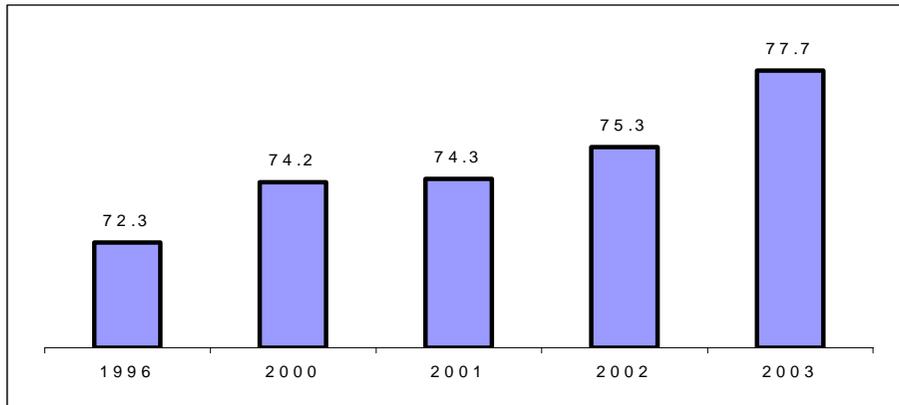
In comparison with the previous 5 years, 2001-2005, the new points of the National Target Program for Poverty Reduction over the next period, 2006-2010, are shifting significantly from support for building 'hardware' (infrastructure for poor

communities) to support for strengthening the ‘software’ (increasing productive and business capacity of the poor and increasing their access to public services), shifting from support of whole communities (the poor communes) to more direct support for poor households. In this context of poverty reduction policies, development of off-farm activities as a tool for job creation and income generation for the poor is to be paid more attention to by the governmental agencies at both central and local levels, and by society as a whole.

## **2.2 Policy for development of off-farm business**

Although population growth has been controlled at relatively low rates, every year more than 1.5 million young people in Vietnam are added to the national labour force. Because labour absorption into agriculture is limited, lack of employment is one of the most serious problems in rural areas. Currently 24 million labourers lives in rural areas and depend on farming production. This represents a surplus of at least 7 million rural labourers who need employment and income (Dang Nguyen Anh [2005]). Statistical data of employment shows that rural labourers are employed for around 70-80% of their available working hours. (see Figure 2).

**Figure 2: Rate of working time used in rural areas**



*Source:* GSO, 2004a, p. 45.

Especially, in the delta and coastal areas, where population density is very high and cultivated land is very limited, farmers can only work in the agricultural sector for 3-5 months per year. Labourers have to find work outside their villages. Migration flow from rural areas to urban centres and to less-crowded rural areas happens in terms of both

permanent and seasonal migration. Every year, dozens of millions of rural people leave their homes to work in other localities. However, employment in rural areas is still not fundamentally improved (Dang Nguyen Anh [2005]). Indeed, the lack of a stable source of income and landlessness have been reported as the main causes of rural poverty (World Bank *et. al.* [1999]).

In this context, the creation of more jobs for farmers in their home villages is considered one of the key targets of socio-economic development in many localities. In addition to more effective use of scarce natural resources such as land, water and forest for intensifying agriculture, forestry and fishery, development of rural industry and services is the major measure for achieving full employment in countryside.

Long ago, off-farm activities, including handicrafts and small trade, were supplemental jobs of certain peasant households. While cultivation of food crops was always the main job, some households were engaged in handicrafts to produce necessary daily consumable goods, construction materials, productive tools and wares for the spiritual life of their community. When the living standard of the population was low, the demand in services never used to be diversified. Therefore, only a small number of households carried out trade or provided services, such as tailoring, hair dressing, trading food and consumer goods in village markets and other locations.

Vietnamese villages have many traditional handicrafts, some of which, such as production of ceramics, silk, woodcuts, silver goods have thousands of years of history. Handicraft products have been used in localities, transported to urban centres and exported. There are villages that specialised in certain goods thanks to transferring technology and know-how from generation to generation. These crafts became traditional professions for the communities. The villages that have a high percentage of non-farming households used to be called 'craft villages'.

Since their beginning, economic reforms (known as *Doi Moi* policies in Vietnamese) have been creating favourable conditions for the development of off-farm business. As mentioned above, the Vietnamese government considers job creation and poverty reduction in rural areas as a prioritised long-term task. It has made policy to encourage the development of off-farm business with the aim of creating more jobs and increasing the income of the rural population. Decision No. 132/2000/QD/TTg signed by the Premier Minister on 21st November 2000 clearly reflects this policy.

According to this Decision, off-farm activities in rural areas are encouraged to develop in order to satisfy the demands of domestic consumption and export, for labour absorption, to increase households' income, contribute to poverty reduction, and to preserve the traditional culture. Detailed plans and legal background are promulgated in

order to regulate the development of off-farm activities to cope with market economy. The consumption of rural off-farm goods and services are encouraged, in particular, products made from local materials such as wood, bamboo, rattan, which may reduce the negative impacts of plastics, chemicals and industrial waste on the environment. The above mentioned Decision also raised other needed measures, such as the protection of intellectual property and production know-how, the establishment of local professional societies, supporting enterprises and individuals in vocational training, mobilising resources, supplying information, advertising, research and technology transfer.

The Government has issued policies encouraging the establishment and development of small to medium enterprises. The Decree No.90/2001/ND-CP on 23rd November 2001 contains regulations towards small to medium enterprises on preferential taxation, transferral of land use rights and the use of land as collateral for obtaining credit. A special agency, the Department for Small to Medium Enterprise Development in the Ministry of Planning and Investment, has been established to assist the development of small to medium enterprises. At the local level, many provinces have been designing and implementing programs for the development of rural off-farm business or programs for the development of craft villages. The responsibility for planning and managing off-farm business is given to the Provincial Department of Industry or the Department of Agriculture and Rural Development.

Some special measures for promoting the development of off-farm business in the countryside are transferring the technology of new off-farm businesses to rural communities, training labourers in industrial professions, and improving knowledge management for business managers. The budget for these measures is allocated from the provincial budget. Due to limited local budget, the size of the programs for industrial promotion is still less than can meet the demand from vocational training centres in rural communities. Ha Tay province is an example. This province has 409 craft villages and 337 thousand handicraft workers<sup>2</sup>. The province ranks first in Vietnam in terms of number of craft villages. There are thousands of masters and highly qualified workers in craft villages. Many products made by craft villages in this province, such as lacquer, wood, stone, silk and bamboo-rattan products, are well-known in domestic and foreign markets. Between 1999 and 2000, 1 billion VND was allocated from provincial budget for the program for industrial promotion. Since 2001, the annual budget allocated for this program has been 1.5 billion VND. Most (two thirds) of the budget has been used for

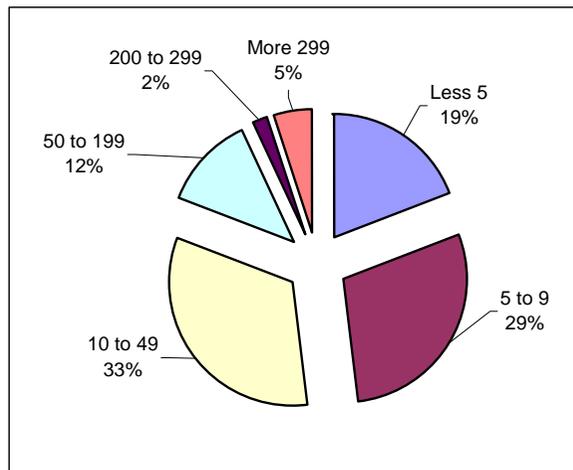
vocational training in the villages where no craft goods are produced as yet. During the two years from 2001 to 2002, 405 vocational training courses were organised and 21,500 persons were trained. Two training courses on managerial skills were also organised for the owners of small to medium enterprises and heads of households. As a result of the program for industrial promotion, 23 traditional craft villages have been rehabilitated, 10 craft associations have been established with voluntary participation of workers in woodcutting, silk knitting, embroidery, metal processing and other crafts.

### 3. DEVELOPMENT OF OFF-FARM BUSINESS IN RURAL AREAS

#### 3.1 Small to medium-scaled enterprises and informal business

Most enterprises in Vietnam are small to medium scaled. Among a total number of 62,908 enterprises registered by 31 December, 2002, 48% had less than 20 employees and 81% had less than 50 employees. Only 19% enterprises had 50 or more employees, and 5% had 300 or more employees (see Figure 3).

**Figure 3: Structure of Vietnam's Enterprises by size of employees as of 31 December 2002**



Source: GSO, 2004a, pp. 419-421.

<sup>2</sup> Data of MARD and JICA survey 2003, with criteria for determination of craft villages as villages with at least 20% of households engaged in off-farm activities (MARD and JICA

The enterprises are concentrated mostly in urban and industrial centres, and partly in craft villages. The number of enterprises in only the two biggest cities (Ho Chi Minh City and Hanoi) counts for 38.1% of the total number of enterprises in the whole country (GSO [2004a]). In Bac Ninh province, 90% of enterprises are located in the provincial, district centres and in craft villages.

Besides the officially registered enterprises, informal business (unregistered business activities of households and individuals) is also common in Vietnam. Most off-farm activities in rural areas belong to this category. For example, 89% of craft labourers in Bac Ninh province work at home, while only 11% work in companies and co-operatives (Bac Ninh DPI [2005]). Thus, the informal household business, small to medium-scale enterprises are the main business forms in the countryside (see Table 1).

**Table 1: Labourers in off-farm business in Bac Ninh province (November 2003)**

	<b>Number of businesses</b>	<b>Number of labourers</b>
Companies of limited liability	308	8,961
Private enterprises	202	
Co-operatives	214	
Household businesses	18,415	72,608

*Source:* Bac Ninh DPI, 2005. p.31.

### **3.2 Craft villages as a specific pattern of off-farm business development in Vietnam**

Craft villages are usually understood as those villages where many households carry out off-farm activities. However, depending on different criteria, the number of craft villages is defined differently. In the study made by the Ministry of Agriculture and Rural Development, craft villages are understood as villages where at least 50% of households engaged in craft business, or at least 50% of the village's income comes from off-farm activities. In accordance with this definition, there were 610 craft villages in Vietnam in 1999 (MARD [1999]). Another study conducted by the Institute of Environmental Science and Technology took 50% of the village's income or 30% of labourers engaged in craft activities as criteria. In this case, Vietnam had 1450 craft villages in 2003 (VENETCO [2004]).

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[2004]).

In the nation-wide survey carried out by MARD and JICA in 2002, the criteria for being selected as craft villages are as follows: either (1) more than 20% of households engaged in craft making, or (2) the commune in charge recognizes craft making as important for the village. According to these criteria, the number of craft villages in Vietnam was 2017 in 2002 (MARD and JICA [2004]). This number accounts for 2.5% of the total number of villages in the country. Ha Tay - with 409 craft villages - is the province with the largest number of craft villages. Following Ha Tay are Thanh Hoa province with 201 villages, Son La province with 191 villages, and Thai Binh province with 133 villages. All these provinces are in the North of Vietnam. The Northern provinces have more craft villages than the southern provinces. The Red River Delta is the region, where most craft villages are located (see Table 2).

**Table 2: Number of craft villages in different regions by two criteria**  
(Villages having 50% or 20% households engaged in craft activities)

Region	Number of provinces	Number of craft villages		Province having the largest number of craft villages	
		50%	20%	50%	20%
Red river delta	11	280	866	Thai Binh 63	Ha Tay 409
Northeast mountains	11	56	164	Bac Giang 6	Bac Giang 21
Northwest mountains	4	8	247	Son La 4	Son La 191
North central	6	98	341	Thanh Hoa 64	Thanh Hoa 201
South central	6	44	87	Binh Dinh 16	Quang Nam 30
Central highlands	4	0	0	-	-
Southeast	9	38	101	Binh Thuan 11	Hochiminh City 39
Mekong river delta	13	86	211	An Giang 27	Vinh Long 40
<b>TOTAL</b>	<b>64</b>	<b>610</b>	<b>2017</b>		

Source: MARD and JICA, 2004, pp. 1-4; VENETCO, 2004.

The MARD and JICA survey also includes the mapping of craft villages. Craft villages were grouped by product into 11 major types, based on the main production material: (1) rush products, (2) lacquer ware, (3) bamboo and rattan products, (4) ceramics, (5) embroidered products, (6) woven textiles, (7) woodcrafts, (8) stone carving, (9) handmade paper, (10) woodblock prints, and (11) metalwork. Among the 11 craft groups, bamboo-rattan craft is the most popular. 713 craft villages, accounting for 24% of the total number of craft villages in the whole country, specialise in this type of work. The ranking after bamboo-rattan products is; textile production (in 432 villages, 14.5%), woodcrafts (342 villages, 11.5%), embroidered products (341 villages, 11.5%), rush weaving (281 villages, 9.5%), metalwork (204 villages, 6.9%), ceramics (61 villages, 2.1%), stone carving (45 villages, 1.5%), lacquer ware (31 villages, 1%), paper (8 villages, 0.3%), and woodblock prints (4 villages, 0.1%). The other types of crafts besides these 11 groups exist in 509 villages and account for 17.1% of the total number of craft villages (MARD and JICA [2004: 1-4]).

It is to note that the mentioned criteria of craft village definition are based on market-oriented production and cash income. This definition of craft villages does not take into consideration the off-farm production for self-subsistence in rural households and communities. In reality, many communities remain a self-subsistent economy. They have limited connection to the market, and economic life is still very much based on the 'barter' system and exchange of goods. Various handicraft products are produced by households and used by themselves and by neighbouring households in mutual exchange of goods, and are not on sale to the general market. These products are not priced and not calculated into official income statistics. In many communities in the Northern Mountainous Region and in the Central Highlands, the percentage of people carrying out traditional handicrafts in this way is large. The role of handicrafts in people's lives is relatively high. If this feature was taken into consideration, the number of craft villages would increase significantly and the map of rural off-farm activities would be seen differently.

## **4. IMPACTS OF THE DEVELOPMENT OF OFF-FARM BUSINESS ON THE RURAL ECONOMY**

### **4.1 The contribution of off-farm business to rural development**

From the results of existing surveys, especially those conducted by MARD and JICA, we can see that the development of off-farm business in general and craft villages in particular has a fundamental contribution to rural development and poverty reduction. Firstly, off-farm business has been absorbing a large number of labourers and contributing to the reduction of the existing underemployment in rural communities. The number of off-farm labourers in 2,017 registered craft villages is 1.350 thousand persons (of which 510 thousand were male and 840 thousand were female). On average, every craft village has 668 off-farm labourers, accounting for a quarter of the total population of the village. The Red River Delta and the Southeast Region have a higher population density and a respectively higher concentration of off-farm workers. On average, each craft village in these regions has 900 off-farm labourers, compared with 3-400 labourers in the other regions in the country. Depending on the characteristics of production, some off-farm business sectors employ elderly people and child labour. However, the average age of off-farm labourers in craft villages is 20-30 years old. This means that young labourers are mostly mobilised in off-farm activities. This is meaningful in the context of a shortage of jobs among young labourers in the countryside. Employment in off-farm businesses is relatively stable. On average, craft labourers are employed between 8 to 10 months a year (MARD and JICA [2004: 4-13]).

Secondly, off-farm business brings a higher income than work in the agricultural sector, and this contributes meaningfully to poverty reduction. The income of the households which are engaged in off-farm business is 1.5 times higher on average than that of rural households. The average monthly income of a craft worker is approximately 366,000 VND (see Table 3). The figure is higher than the national and rural averages, which are 295,000 VND and 225,000 VND, respectively (GSO [2004b]). Thanks to this, the poverty rate of off-farming households is relatively low – about 3.7%, while the poverty rate of the whole country is 10.4% in accordance with the poverty line defined by the Ministry of Labour, Invalids and Social Affairs (MARD and JICA [2004: 3-11]).

**Table 3: Working hours and salary of labourers in craft villages**

Production	Working hours (per day)		Average salary (1,000 VND per month)		
	Male	Female	Male	Female	Average
	8	8	271	304	296
Lacquer ware	9	9	586	386	474
Bamboo and rattan	8	9	333	258	288
Ceramics	9	7	560	326	444
Embroidery	8	7	251	207	212
Textile	9	6	365	187	222
Wood	9	8	599	551	589
Stone	8	8	568	456	540
Paper	9	8	359	281	324
Metals	8	8	759	467	666
Average	8	8	396	311	366

*Sources:* MARD and JICA, 2004, pp. 4-13.

Thirdly, development of off-farm business contributes to enforcing fast economic growth, changes of economic structure and industrialisation in rural areas. In the localities, where off-farm activities are developed, the share of sector I (agriculture, forestry, fisheries) decreases and the shares of sector II (industry and construction) and sector III (services) increase respectively. In Bac Ninh province, for example, the share of sector I activities decreased from 37.9 percent in 2000 to 29.1 percent in 2004, while sector II increased respectively from 35.7 percent to 43.0 percent, and the sector III increased from 26.4 percent to 27.9 percent (GSO [2005: 207]).

During the development of off-farm business, many villages become connected to wider domestic and international markets. Market requirements force villagers to improve technology, equipment, production organisation and the quality of products. Handicraft industries have been gradually transformed to full industrial production. In some provinces, the booming development of cottage industry has led to the establishment of large industrial parks. For example, the provincial government of Bac Ninh has advocated planning the production and re-arranging of industrial manufacture units into industrial groups and industrial areas for craft villages, which would be carried out by the communes themselves. According to the long-term socio-economic

development strategy of Bac Ninh province, 21 industrial clusters (industrial parks) with a total area of 406.64 hectares are to be built to service the development of rural small to medium scale enterprises and household businesses. By the end of 2005, nine industrial clusters had already built technical infrastructure. Six of these industrial clusters had leased out their land to 463 production workshops. Another six industrial clusters are under construction. However, 22 enterprises have already registered to rent land in these industrial areas. (Bac Ninh DPI [2005: 22-27]). The development of industrial production requires an extension of trade and services in villages to meet the increasing consumption demand of villagers and the demand on production materials and equipment.

#### **4.2 Weaknesses**

Despite the positive impacts of development of rural off-farm business, there are some weaknesses of this development process. Firstly, one of the most important characteristics of off-farm business is that trades and crafts are often introduced and expanded spontaneously by people in the village. Therefore they are not controlled, managed or supervised by competent agencies in terms of technology, labour and environmental safety. Production workshops are formed from small, side-line businesses undertaken by households with a view to providing additional income and employment for family members. Hundreds of production workshops in each village develop in a spontaneous way without any planning.

The second weakness of the off-farm business development is the level of technology and lack of highly-qualified workers and managers. Production workshops use various forms of technology and have different production scales. Most industries in rural areas apply simple handicraft techniques and methods, and are conducted on a small, family-sized scale. A number of production workshops have invested in more up-to-date machinery and technologies for production on an industrial scale. However, these are still low technologies, often scrapped by major enterprises and transferred to industries in the rural area.

As mentioned, labour is the abundant resource in villages. However, most farmers have no qualifications in industrial professions. They train each other in an informal way. Their production is based mostly on traditional working skills. In Bac Ninh province, for example, among 59,600 labourers working in 62 craft villages, only 2.31% had graduated from a college or university, 3.12% had studied at a high vocational school, 2.27% had been trained through a course for technical workers. The remaining 92% of labourers had trained themselves at work (Bac Ninh DPI [2005], 50). In the whole

country, only 24.2% of labourers in craft villages had participated in official vocational training courses. 66.3% of craft villages lack business managers and 65.4% lack effective technologies (MARD and JICA [2004]: 4-14)). In the context of a market economy, lack of marketing capacity, technical renovation and qualification of labourers are disadvantages for business.

Thirdly, due to poor competitiveness, low investment, lack of needed materials and weak links with the consumer market, craft industries in rural areas have a high level of instability. They can expand very quickly but demand may also decline or even disappear rapidly. The instability of production and market has a major affect on the living standards of population.

It can be seen from the above-mentioned characteristics, that when the rural off-farm workshops are still few and their scale is still small, their impact on social and environmental development is not noticeable. But once rural handicrafts expand to the extent that villages are industrialized and once side-line jobs become the main economic activity of the whole community, economic, social and environmental changes will create impacts that forfeit the sustainability of community development.

## **5. LINKAGE BETWEEN DEVELOPMENT OF OFF-FARM BUSINESS AND POVERTY REDUCTION**

### **5.1 About the survey**

In the section below, based mainly on field survey data from five communes in Bac Ninh and Ha Tay provinces, we will examine the link between the development of off-farm activities and poverty reduction, living standard equality and the improvement of quality of life of the rural population. Four craft communes and one 'purely agricultural' commune were selected. In each commune, about 100 households were randomly selected and surveyed using a semi-structured questionnaire. Some other households were interviewed in-depth. The following five communes are those selected for our survey:

**(1) Phong Khe commune** (Yen Phong district, Bac Ninh province) lies 30 km away from Hanoi. It is comprised of 4 hamlets with 1,800 households and a total population of 8,000. The commune covers an area of 512 hectares including 260 hectares of farming land. The commune has a profession of making *do*, a special traditional paper. About ten years ago, some production workshops produced recycled paper for firecrackers and a few

workshops produced *do* paper for making the traditional Dong-Ho pictures and flimsy typewriting paper. Since the Government banned firecrackers, the commune's main products have lost their outlets. Households switched to producing toilet, packing and writing paper. The commune currently has 130 paper-producing complexes, turning out over 80,000 tones of paper of various kinds in 2004 and earning 240 billion VND. This production volume is equal to the output of the biggest paper factory in the North of Vietnam, the Bai Bang Paper Company.

Industrial production has greatly contributed to economic growth, job creation and increased incomes for people in the communes. However, it also entails a series of grave consequences, the most serious one being environmental pollution.

**(2) Tam Da commune** (Yen Phong district, Bac Ninh province) covers an area of 819 hectares and is comprised of four hamlets. It has 2,837 households with 10,940 people.

Alcohol brewing techniques have been passed down through generations of local people for almost 100 years. However, before 1980 due to food shortages in the country, the Government did not permit the private production of alcohol. After 1980, alcohol brewing expanded quickly among households in the commune. More than 10% of households are been engaged in this economic activity. The other food processing industries, such as rice noodle production, have also been developed. In parallel with food processing industries, pig rearing has been expanded and brings additional income to households.

**(3) Phu Nghia commune** (Chuong My district, Ha Tay province) is a commune with a high percentage of households engaged in bamboo-rattan production. Located in the highly populated delta, the commune has little land for cultivation. More than 9,200 inhabitants from 2,024 households have only 475.8 hectares of cultivating land. The main crop is rice. For dozens of years now, the commune has been connected with bamboo-rattan product exporters and therefore the production of these goods has been extensively developed. Currently, there is one state-owned company, 17 private companies, and 22 co-operatives producing, trading and exporting these goods. 1,338 among a total of 2,024 households (66%) are engaged in this craft production. Household members of almost all ages participate in production.

**(4) Van Phuc commune** (Ha Dong town, Ha Tay province) is a traditional silk worm breeding and silk weaving area. In the urbanisation process, silk worm breeding has disappeared. However, silk textiles and garments industries have rapidly developed. Production materials are supplied from different domestic sources. Manual weaving equipment has been replaced by machines, but production is conducted mainly at home. Households use their houses for both living and production. Located in the sub areas of the Ha Dong town, the commune has currently very little cultivated area (only 46

hectares) and is being transformed into an urban community. There are 2 state-owned enterprises, 28 private companies, 3 co-operatives and 1,780 households (of 2,542 households in the commune) engaged in producing and trading textiles. There are more than 1,100 silk weaving machines and several dyeing workshops. 3,600 inhabitants of the commune and thousands of outside labourers work in this craft area.

The four communes are in different stages of industrialisation. Paper production in Phong Khe commune is being transformed from a cottage industry to machinery production in concentrated industrial workshops. Textile production in Van Phuc commune is conducted by machines, but is still located separately in cottages. Food processing (alcohol and noodle production) in Tam Da commune and bamboo-rattan production in Phu Nghia commune are handicrafts and require little machinery. For a comparison between craft villages and non-craft villages, besides these four craft communes, we surveyed one commune where the population is engaged mainly in agricultural activities.

**(5) Duc Long commune** (Que Vo district, Bac Ninh province) is a typical 'purely agricultural' commune. The craft industry here consists of some brick production workshops only. The commune covers an area of 928 hectares including 608 hectares of farming land. There are 2,837 households with 10,940 people. The main crops are rice and vegetables. Besides cultivation, farmers raise cattle, pigs and chickens.

In the following sub-section, the impacts of off-farm business such as impacts on income generation and poverty reduction, on quality of life, and on environment and health of people are presented.

## **5.2 Impacts of development of off-farm business on income and poverty**

As presented above, off-farm business plays a significant role in the income generation of households. The data of our field survey explains more about this statement. Rural households, especially those in the delta areas, have little cultivated land. The per-capita agricultural land is only 325 sq.m. in Phong Khe commune, 470 sq.m. in Tam Da commune and 514 sq.m. in Phu Nghia commune. In the 'purely agricultural' commune Duc Long, the per capita area of agricultural land is 555 sq.m. Cultivating rice and harvesting bi-annually means households have a rice yield of 300-500 kg per capita. This yield is enough for the food consumption needs of households. In Van Phuc commune,

due to urbanisation, each person has only 42 sq.m. of agricultural land on average. Calculating for farming households solely, each person has only 182 sq.m.

The limited land area gives a respectively limited amount of income. The data of our household survey shows that household income from cultivation each year is low, 0.8 million VND in Phong Khe commune, 1.4 million VND in Tam Da commune, 2.8 million VND in Phu Nghia commune and only 0.2 million VND in Van Phuc commune. Even in the 'purely agricultural' commune Duc Long, cultivation brings in only 2.6 million VND to an average household. Dividing this income by the number of persons in a household, from 4.5 to 5 persons, we can easily see how low the income received from cultivation is.

Besides cultivation, livestock and fish breeding are important sources of income in the traditional agricultural economy. The amount of income from these sectors differs in each village. In the villages which do not have crafts industries, rearing livestock is the most popular activity of farmers to generate an additional income, because this activity requires little investment, has a short production cycle and low risk, and makes use of the labour of women, children and elderly members of households. This explains why most micro-credit in poor regions is provided nowadays for livestock (raising pigs, cows, buffaloes, goats and chickens). In Tam Da commune, alcohol brewing brings in a small amount of income, but households use the waste materials of alcohol brewing for pig raising, thus providing more income. Alcohol-brewing households used to raise between 5 to 10 pigs. More than 80% of the surveyed households in this commune have livestock and this activity brings on average 3.74 million VND a year to each household. In the 'purely agricultural' commune, 53% of households take part in livestock breeding and each household receives 3.5 million VND per year from this activity.

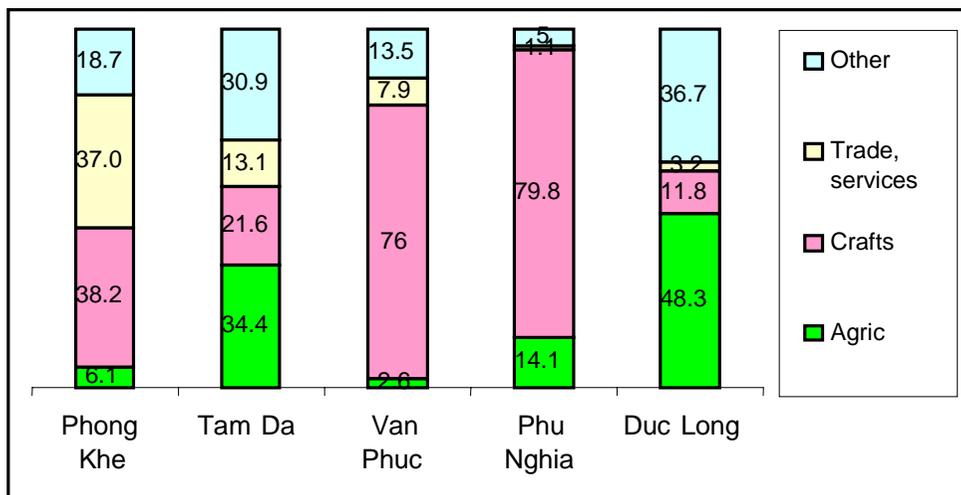
In the villages that have developed off-farm business, few residents raise livestock, since people prefer to spend their working time on industrial and trading jobs. In Phong Khe commune, for example, 50% of surveyed households have income from animal livestock, and it accounts for only 1.53 million VND per household per year. The same figures in the other villages are 61% and 0.5 million VND in Phu Nghia commune, and only 9% and 0.4 million VND in Van Phuc commune.

In total, the income from the agricultural sector counts for 34% of the total income of surveyed households in Tam Da commune, 14% in Phu Nghia commune, 6% in Phong Khe commune, and only 2.6% in Van Phuc commune. The remainder of the total income comes from off-farm sectors. The shares of these income sources are 66% in Tam Da commune, 86% in Phu Nghia commune, 94% in Phong Khe commune, and 97.4% in Van Phuc commune. In comparison, the income from the agricultural sector in

the ‘purely agricultural’ commune Duc Long accounts for 48.3% of total household income, and income from off-farm sources accounts for 51.7%.

As the data shows, off-farm activities provide more than half of the income of farming households and more than 90% of household income in the industrialised villages (see Figure 4). While the agricultural sector has limited space for further growth, the growth of household income depends very much on the scope and speed of off-farm business development.

**Figure 4: Income structure of households in the five surveyed communes (%)**



Source: Author's survey.

The analysis of household income in the surveyed communes shows the following results. Firstly, there are big income gaps between different villages, and the level of industrialisation determinates the household income. The paper production in Phong Khe commune reaches the highest level of industrial development among all surveyed communes, and the level of income of this commune is the highest. Van Phuc commune has machinery production in a cottage textile industry. The income level is at a medium level. The production of bamboo-rattan products is mainly manual, but the income of the labourers is much higher than that of households in the ‘purely agricultural’ commune Duc Long (see Table 4).

**Table 4: Per capita monthly income of the surveyed households**

Unit: 1,000 VND

Commune	Average per capita income			
	All surveyed households	Industry oriented households	Trade oriented Households	Purely Agricultural households
Phong Khe	704	1031	651	266
Tam Da	247	219	293	149
Van Phuc	436	468	412	222
Phu Nghia	416	434	274	286
Duc Long	194	416	347	166

*Source:* Author's survey.

Secondly, the income of households engaged in handicrafts is only higher than that of farming households. This can be clearly seen in Phong Khe commune. Here the income of households involved in industrial activity is 4 times higher than that of farming households (without industrial and trading activities). In Van Phuc and Phu Nghia communes, the income of households taking part in industrial activity is 2 - 2.5 times as high as that of farming households. In villages where agricultural activities still play a major role in income earning and where cottage industrial activities are supplemental jobs, the income gap between different professional groups is not large. In Tam Da commune, almost all households are involved in agricultural activity, and 62.4% of those households carry out craft production as supplemental work. The income gap between craft households and farming only households is about 1.5 times.

Thirdly, the position of labourers in the business makes significant difference to their income. There are three major types of position: (i) owners of workshops with hired workers; (ii) self-employed cottage business owners; and (iii) hired workers. The income of these three groups differs remarkably. The households having small paper workshops in Phong Khe commune have a per capita income of 2.5 million VND per month. Meanwhile, the per capita income of households involved in cottage production is 1.02 million VND and that of households working as hired labour is 0.47 million VND per month only. In Phu Nghia commune the per capita income of a household that owns a small company is 1.5 million VND per month. This is three times the income level of households involved in industrial cottage activity.

Fourthly, the income of off-farm workers in rural areas is not high, compared to the income level of labourers in urban areas. In Phong Khe commune, unqualified labourers working in paper workshops earn 700,000 - 900,000 VND per month. The salary of textile workers in Van Phuc commune is at a similar level. However, this is a very low income, just equal to the lowest salary of industrial workers in urban centres. In Tam Da commune, an alcohol-brewing or noodle-producing labourer earns 400,000 – 500,000 VND in a month. It is low, but twice as high as the current national poverty line. This means, an off-farm labourer can secure the minimal life necessities for himself and one another person.

Fifthly, income differentiation is increasing in pace with and due to off-farm business development. From the social aspect, the drastic income differentiation has created an ever-wider gap between the rich and the poor in terms of living standards. The gap in the income between the richest 20 percent of households and the poorest 20 percent of households in Phong Khe commune is over 16 times, while this figure in Tam Da commune is 6.5 times and approximately equal to the average level of the Red River Delta, i.e. 6.9 times, as shown by the Vietnam Living Standard Survey in 2002-2003 (GSO [2005: 144]). The similar indicator is 3.2 in Van Phuc and Phu Nghia communes (see Table 4).

The widening income gap is an unavoidable trend in the context of rural industrialisation. The key issue raised for policies is to strengthen the poverty reduction process, so that income differentiation would be not based on deepening poverty, but only on faster growth of income in the richer groups than that of the poorer groups. The development of off-farm activities in rural areas has this impact and it increases the income of both rich and poor groups, but favours the rich.

**Table 4: The average income of household quintiles**

Unit: 1,000 VND

	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5	Difference Q5/Q1 (times)
Phong Khe	133	249	383	667	2160	16.3
Tam Da	81	145	208	290	525	6.5
Van Phuc	217	345	425	494	688	3.2
Phu Nghia	211	340	394	466	670	3.2

*Source:* Author's survey.

### **5.3 Improving quality of life**

The development of off-farm business requires adequate infrastructure, namely roads, transportation system, electricity and water supply. Rural infrastructure is improved to meet the demands of production, but also serves the daily life of the local population. At present, all households in the Red River Delta have access to electricity in daily life. Dwellings have been newly constructed and repaired. A comparison of housing types over the 5 years from 2000 to 2005 in the surveyed communes shows improvement. The percentage of permanent houses (multi-storey and one-storey brick houses) has increased in all five communes. At the same time, the percentage of semi-permanent houses (wood houses, old brick houses) and temporary houses (bamboo houses, thatch-roofed houses) has decreased. It is noticeable that the number of temporary houses remains very low. The poor used to live in temporary housing. In the nation-wide poverty reduction movement, the National Program for Poverty Reduction, the major social organisations and rural communities have planned to assist the poor in housing improvement and to 'delete' all temporary houses in the coming years.

The housing situation in the craft villages has improved much more than in the 'purely agricultural' villages. As data shows, during the 5 year period the structure of housing in the 4 craft communes has changed significantly, while it has not much changed in Duc Long commune (see Table 5). Quality of life is expressed by people's access to information and communication. The percentage of households that own audio-visual equipment such as radio receivers, TV sets, video players and so on has increased rapidly and is high in craft villages. Households in craft villages have purchased the durable goods that make human life more comfortable such as a fridge, washing machine, telephone, computer, bicycle and motorcycle. It is obvious that people in craft villages have more durables than people in 'purely agricultural' villages (see Table 6).

**Table 5: Types of dwelling (percentage of surveyed households)**

Unit: %

Commune and year	Type of dwelling				
	Multi-storey permanent house	One-storey permanent house	Semi-permanent house	Temporary house	No owned house
Phong Khe					
- 2000	11.2	22.4	52.0	14.3	0
- 2005	29.6	33.7	32.7	4.1	0
Tam Da					
- 2000	15.1	28.0	41.9	14.0	1.1
- 2005	29.8	34.0	30.9	4.3	1.1
Van Phuc					
- 2000	8.0	16.0	73.0	3.0	0
- 2005	11.0	16.0	71.0	2.0	0
Phu Nghia					
- 2000	2.0	16.2	72.7	5.1	4.0
- 2005	3.0	26.0	67.0	2.0	2.0
Duc Long					
- 2000	2.7	67.6	27.9	1.0	0
- 2005	7.8	67.0	23.5	1.7	0

Source: Author's survey.

**Table 6: Percentage of households having durable goods**

Unit: %

Commune	TV set	Fridge	Washing machine	Tele-phone	Com-puter	Bicycle	Motor-cycle
Phong Khe	97.9	59.2	6.1	60.2	7.1	87.8	57.1
Tam Da	96.8	9.6	0	21.3	3.2	93.6	47.9
Van Phuc	99.0	41.6	15.8	25.7	3.0	84.2	62.4
Phu Nghia	97.0	14.0	0	37.0	3.0	81.0	64.0
Duc Long	93.8	7.8	0	16.5	0	96.5	56.5

Source: Author's survey.

## **6. IMPACTS OF OFF-FARM BUSINESS DEVELOPMENT ON THE ENVIRONMENT AND PEOPLE'S HEALTH**

The spontaneous development of rural off-farm business creates serious environmental pollution in villages and impacts negatively on the population's health. This is a real problem that the government and rural communities have to solve.

### **6.1 Environmental degradation**

The environment of most rural areas is, in general, not polluted yet. However, in many craft villages, pollution occurs due to industrial waste, sewage water, machinery sound and smoke. Since households use their houses and gardens as a production place, pollution sources directly affect the surrounding environment of residential areas. Craft village pollution differs depending on the type of craft and their products.

Water pollution is a typical case. Industrial wastewater contains hazardous chemicals, heavy metals and organic substances. In rural areas, there is little or no effective sewage system, therefore industrial water pollutes not only surface water, but also underground water. It makes safe water for general consumption more difficult to procure. To produce one tonne of paper products, producers in Phong Khe commune have to use 20-30 m<sup>3</sup> of water. Each day, the commune produces over 200 tonnes of paper and discharges 5,000-6,000 m<sup>3</sup> of water. The recycling of paper does not require as many chemicals as production. Nevertheless, toilet paper producing workshops often use a great deal of whitening chemicals. The broken down substances and organic compounds from raw materials are discharged into the surface water sources. As a result, the canals, ponds and lakes in the paper-producing villages have been seriously polluted. Liquid waste cannot flow into rivers because it has to run through pumping stations. Therefore, it is constantly stagnant. The broken down organic substances produce a foul odour. The air in the area is also polluted due to the evaporation of chemicals (sodium hydroxide, chloride and hydro sulphuric acid H<sub>2</sub>S), steam, dust and coal gas (CO, NO and SO<sub>2</sub>) given off by steam ovens fuelled by coal. Thus, all four types of pollution, namely dust, air, water, and noise affect the population in Phong Khe commune.

As somewhat different from the case of Phong Khe commune, the industry producing foodstuffs such as distilling alcohol, producing noodle and making soya-bean cakes in Tam Da commune still applies handicraft methods. Each family has one or more coal stoves for distilling alcohol or making dry pancakes. The combination of food processing with pig rearing is an effective business model that has been multiplied. On

average, each household raises 12 pigs. The liquid waste from alcohol brewing and pig breeding is directly discharged into the canals and rivers. This waste is black and fetid. On average, each household discharges 1.3-1.5 m<sup>3</sup> of sewage water into rivers each day. The air is polluted by the odour of organic matter. Surface water in the bamboo-rattan processing villages in Phu Nghia commune is also polluted to the same degree as that in the above mentioned communes. Ponds, lakes and canals in these villages are used for washing and keeping raw materials and are seriously polluted by chemicals and organic substances.

Water pollution directly affects safe water supply for the population, which is the most urgent issue in securing fundamental living conditions. In Vietnam's rural areas, in general, the water from drilled wells used to be considered safe. Data from the National Healthcare Survey 2001-2002 shows that only 7.8 percent of households used treated water from drilled wells and 14.6 percent of households used untreated water from wells. Other sources such as rainwater and water from dug wells are also considered safe. In all, rural area have 76 percent of households with access to safe water and 24 percent having no access, including 9.8 percent using polluted well water, 12.6 percent using water from rivers, streams, ponds and lakes and 1.6 percent using water from other sources (MOH and GSO [2004: 454]).

Comparing this data, the high rate of households using water from drilled wells in craft villages like Phong Khe and Tam Da is not a happy sign of safe water access. Because of industrial pollution of the underground water in these villages, people are compelled to use treated water from drilled wells, otherwise they would not have any other usable source of safe water. Even drilled well water taken from tens of metres below ground is polluted. In Van Phuc commune, a number of households located near the dying workshops complain about water polluted by chemicals. The assessment of the majority of households in the surveyed communes shows that the safety of the water sources they are using has not met the necessary standard. In all communes except Van Phuc commune, where the people use tapped water, between 80 and 90 percent of the households using drilled well water feel that the water they are using is not safe. Even the 20 percent of households in Phong Khe said that it was very dirty (see Table 7).

**Table 7: Sources of drinking water in surveyed communes  
(percentage of households)**

Unit: %

Commune	Tapped water	Drilled well, rain water	Dug well	Percentage of households assessing as unsafe water
Phong Khe	0	98.0	2.0	89.2
Tam Da	0	100.0	0	95.8
Van Phuc	94.0	6.0	0	7.8
Phu Nghia	0	78.0	22.0	9.0

*Source:* Author's survey.

Apart from the pollution of water sources and soil by the discharged wastes from production, industrial production also causes serious air pollution. Production workshops use coal as the main fuel for stoking steam stoves. Since the stoves are located in the residential areas, the air in craft villages is not only polluted by the smoke, dust containing poisonous and harmful substances, but also heated, especially in summer. People know about the negative impacts of pollution on their health, but they cannot change the situation, since they have to have jobs and income; otherwise they would fall in poverty. One woman in Tam Da commune said: 'I make noodles, each day I use 40 kg of rice. If it is sunny, the production consumes 50 kg of coal; if it is rainy, it needs 100 kg. I am chronically ill; doctors at the hospital told me if I discard the coal stove, my ailing will be over; and if I still stick to it, the pollution will keep affecting my body. But I cannot leave it, because I will not have a job and I will be miserable. Therefore I must continue'.

Besides industrial pollution, pollution caused by garbage from daily life constitutes another agent that worsens the rural environment. Many households throw rubbish into rivers, canals and public places. The result of a national healthcare survey in 2001-2002 revealed that 7.1 percent of rural households have rubbish collected by public vehicles; 18.9 percent processed rubbish into compost; 63 percent treated rubbish by burning; 23 percent buried rubbish; 15 percent threw it into water; and 21.6 percent had no fixed spot to dump rubbish (MOH and GSO [2004: 461]).

Craft villages like Phong Khe, Tam Da and Phu Nghia communes have an extremely low rate of households that treat garbage by processing it into compost, burning or burying. One reason is that agriculture no longer holds an important position in these places and with easy income from non-farming trades, people buy chemical fertilizer in

place of self-made organic fertilizer, which brings about higher economic efficiency and saves labour. But another and more important reason is that these localities often have a high population density and almost all surrounding land has been occupied by workshops, storehouses, sites in service of production or shops. Land in craft villages has been nearly fully covered by buildings and no one uses these precious plots of land as a place for dumping, burying or burning garbage. In the meantime, the majority of hamlets and communes have no public garbage-collecting system. Garbage from daily life and production is dumped into public places - roadsides, dykes, sewers, canals, rivers, lakes and ponds. As many as 85 percent of the surveyed households in Tam Da commune; 56 percent in Phu Nghia commune, 54 percent in Phong Khe; and 36 percent in Duc Long communes discard garbage in this way. The rate of dumping of garbage that causes pollution to water sources and public land in craft villages is considerably higher as compared to those villages that do not practise industrial activities.

## **6.2 Negative impacts on health**

Water, air and land pollution has affected people's health. Many healthcare staff in the surveyed districts stated that the handicraft villages possessed a much higher rate of disease due to pollution than purely agricultural communes, namely respiratory diseases, dermatitis, diarrhoea and sore eyes. According to the head of Phong Khe commune clinic, the rate of people contracting diseases associated with environmental contamination in this commune is higher than that in agricultural communes. For instance, the rate dermatitis in Phong Khe commune is 17-20% whereas it is only 10% in other communes; respiratory diseases: 15% and 5%; digestive diseases: 10% and 5% respectively. Diseases related to the working environment such as neurological diseases, chronic insomnia and headaches, which occur in those working with high intensity and labour time of 10-12 hours in a day, have arisen only in Phong Khe commune. The residents in Tam Da commune, especially women, who are directly involved in home-based production, are more likely to get respiratory, eye and gynaecological problems.

Another point to be noted is that at the present time rural industrial enterprises do not yet possess their own healthcare systems. Almost all employees in these enterprises cannot enjoy their basic rights for health care and social insurance, with which employers must comply as stipulated in the Labour Law. In Phong Khe commune, for instance, though there are more than 140 officially registered enterprises with some 4,000 employees (of which 500 are local residents), none of them have any medical staff to care for the health of laborers.

## **7. CONCLUDING REMARKS**

The Development of off-farm business of households, small to medium scale enterprises and craft villages has positive impacts on economic growth and the standard of living. Off-farm business greatly contributes economic growth. The structure of the rural economy transforms rapidly in favour of the increasing role of industry and services. An increasing number of agricultural labourers move to off-farm work. Therefore, the income and living standards of rural households increases quickly. Many poor households have an opportunity to get more jobs and income, and to lift themselves out of poverty.

However, the present spontaneous development of off-farm business leads to some negative consequences, of which environmental degradation is the most urgent problem. Environmental pollution caused by industrial production, consumption and poor environmental public services makes some aspects of life worse, such as access to safe water and maintaining a sanitary residential space. The pollution of living and working environments is a factor leading to increasing illness among residents. Besides pollution, poor labour protection and public health service systems in the workplace are disadvantages of the current rural industrialisation.

In order for rural off-farm business to become more advantageous and to reduce the negative affects, attention must be paid to some issues in the process of policy-making and development management. First of all, the strategy of rural industrialization and development has to be revised from the concept of sustainable development. The present development policies of localities focus mainly on fast economic growth, and at a certain level on job creation and poverty reduction. Environmental degradation used to be considered an unavoidable consequence of industrialisation and rural development. Sustainable development requires policies and efforts to combine economic growth with social development and environmental protection.

Secondly, incentives for the development of rural off-farm business have to be fully institutionalized by the legal system, planning and management mechanism. In the last decade, some legal documents which encouraged the development of off-farm business were issued. However, a more comprehensive and effective institutional system has to be designed and implemented in the coming period. This includes particular policies and measures for encouraging supporting and monitoring development, such as human resources development, technology transfer, securing production materials, providing land for production projects, improving access to credit, supporting marketing, supplying technological and business information, training managerial skills, improving working conditions, monitoring environment and assisting environment protection.

Thirdly, combining the efforts of the governmental administration with the wider community participation in planning and management of rural off-farm business is needed. In villages, the regulations agreed by members of the community themselves used to have the same, if not stronger, power than state law.

Finally, the organization of business clusters is an effective measure to support households, small enterprises and cooperatives in accessing markets and securing stability of production and living standards. Craft clusters are agglomerations of craft producers and businesses located in the same locality and having common buyers, material suppliers or service providers. Large and medium traders and industrial enterprises can play a central role in the local economy as product model designer, trader and contractor, while small enterprises, craft households, and especially poor households can work as producers in the supply chain. This form of business cooperation can reduce any negative affects of spontaneous and unstable development of rural off-farm business on the economic growth and living standards of population and also help to reduce poverty.

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