The development process of craft and industrial village (CIV) clusters in Hà Tây and Bắc Ninh province: from village initiatives to public policies

Sylvie Fanchette*

Since *Doi Moi*, a large number of village households have developed new craft and industrial activities or have diversified production that was until then traditional, thanks to economic liberalisation, freedom to conduct business, the acceleration of links between town and country, and state and provincial incentive policies.

Currently, there are about 1,000 CIVs in the Red River Delta. These villages produce goods for use in the everyday life of villagers and urban consumers (processed foodstuffs, religious objects, industrial products and building materials, commercial and

^{*} Geographer, IRD.

transportation services, etc.) and for export (rattan and bamboo goods, furniture, woollen garments, cultural and decorative goods, etc.). Their inhabitants enjoy levels of income four times higher than those in "agricultural" villages and have thus been able to invest in property and improve their living conditions.

The development of non-agricultural activities in the countryside and rural industrialisation together form one of the Vietnamese government's priorities. This is at once in order to boost incomes of rural households and to stimulate demand for consumer products, but above all to create jobs and limit the rural exodus towards the towns and cities. Indeed, having noted that:

- Agriculture and the state sector are overburdened with underemployed workers, employment for new arrivals onto the job market must come from the private sector;

- CIVs and small, rural enterprises have recorded rapid growth in production (8% annually between 1987 and 1997);

- The activities practised in CIVs generally need low investment in relation to their ability to employ labour and to the capital gains generated by each worker;

- Rural enterprises have played an important part in supplying the basic needs of rural inhabitants during the industrial crises experienced by Việt Nam.

Việt Nam devotes, in collaboration with provincial People's Committees, considerable funds to this end. In this way it hopes:

- To develop traditional crafts to produce consumer goods for domestic and export markets;

- To increase the potential of existing craft villages and create a further 1,000 or so by 2010;

- To encourage industries to hire local labour and use local materials;

- To develop service activities, such as transportation, power supply and water, technical services for agriculture and livestock farming, financial and training services¹.

Our research programme (CASRAD/PHANO/IRD), called "The craft village boom: economic development, industrialisation and urbanisation of rural areas in the densely populated Red River Delta", financed by the French Ministry of Foreign Affairs' Priority Solidarity Fund (*FSP*): "Support for research into issues concerning economic and social transition in Việt Nam", is aimed in particular at analysing, on several scales, the economic strategies of craftspeople and rural entrepreneurs and the impact of public policies established since *Doi Moi* to create a fresh space for traditional and industrial crafts in the Red River Delta craft villages. Through targeted surveys in a sample of villages in Bắc Ninh and Hà Tây provinces, we study the socio-economic and geographical factors favourable to the development of craft villages:

- Between different communes: clusters of CIVs specialised in the same field of activity,

- Within communes: new production areas (industrial sites or informal craft mini-zones) created by the local authorities,

DiGregorio, M. (2001). Iron works: Excavating alternative futures in a northern Vietnamese craft village. Unpublished dissertation. Department of Urban Planning, University of California, Los Angeles.

- Within villages: the process of opening up production, linearization along roadways, filling in ponds to make more living and production space, setting up polluting enterprises along waterways and around lakes and ponds.

CIV clusters: a territorialized system of production that is adapted to the specificity of rural industrialisation in transitional Việt Nam

The CIVs in the Red River Delta are for the most part organised in clusters specialised in one activity. By CIV cluster, we mean a group of villages whose non-agricultural enterprises are specialised in the same activity or same group of activities. Socially, work is divided up within the framework of informal partnership co-operation agreements between small-scale enterprises with complementary activities that carry out a part of the production process and between enterprises of variable sizes linked by subcontracting relationships.

The development of this system of territorialized production benefits from the advantages of grouping together, in one area, know-how, networks of village relationships based on confidence, familial, friendly, political or professional ties, whose origins can be very ancient, and from the flexibility of businesses with very varied statuses. In the oldest CIVs, the craftspeople share a story concerning the veneration of an ancestral craftsman that they reaffirm every year during a festival dedicated to this figure.

Organisation in clusters caters for: the need to increase production space, access to raw materials, the available workforce of rural inhabitants in neighbouring villages, the creation of fresh production sites and, finally, division of labour between villages practising complementary activities (service activities, enterprises higher up and lower down in the commodity chain). Unlike large-scale enterprises in the formal state or private sector, the organisation of village enterprises into clusters is much more flexible and responds more rapidly to the market, in particular thanks to their less cumbersome bureaucracy and to their belonging for the most part to the informal sector. Production costs are lower and they are able to occupy economic niches abandoned by large-scale enterprises from the formal sector who must conform to management and quality norms and to a much more restrictive legislation. They derive greater flexibility from using family labour, in some sectors predominantly female, mostly underpaid for the less qualified tasks; these workers usually carry out agricultural work in parallel.

CIV clusters are of very variable sizes. Some are organised locally over several communes, while others are on a national or even international scale, with a host of actors located higher up and lower down in commodity chains, export agents installed in the major southern city, Hồ Chí Minh City, or abroad. Longer commodity chains are more appropriately referred to as 'networks'.

A. There are three main scenarios

1. Each village is specialised in one type of product but relies on the others for supplies of raw materials, for know-how, production space or labour force. Depending on their activities, there is an entire system of subcontracting and complementarity linking the most dynamic villages to their neighbours, and between private companies and family enterprises.

The example of Đổng Kỵ (Bắc Ninh province):

Đồng Kỵ is a village whose population alongside agriculture practised craft activities (itinerant carpenters) and commercial activities (trade in water buffaloes). Since *Doi Moi*, some of the population managed to switch activities rapidly to the craft of making decorated furniture thanks to a spirit of enterprise, the business sense of certain households and the mobilisation of their financial capital and social network to use the know-how of craftspeople from surrounding villages. This village has become the centre of one of the most dynamic clusters of the region that links villages in several communes, some of them located in different provinces (Hà Nội, Hà Tây, Nam Định).

1) Three types of working relationships exist between the villages in the cluster:

- The formal enterprises (limited companies, cooperatives, registered enterprises) of Đồng Kỵ subcontract part of the production process to a host of satellite family workshops located in the villages of the surrounding communes [Hương Mạc, Phong Khê, Thiết Bình and Vân Hà (Hà Nội province)]. These have long been specialised in wooden sculpture for religious rituals and for the Imperial Court, bas-reliefs, lacquer or simple joinery and they carry out part of the decorated furniture production process for large-scale Đồng Kỵ enterprises. The latter also call upon craftspeople from other provinces, such as those in Chuyên Mỹ (Hà Tây province), specialists at inlaying wood with mother-of-pearl, and in La Xuyên (Nam Định province), specialists at making traditional furniture.

- Đồng Kỵ enterprises employ craftspeople from surrounding villages in their workshops to put pieces together or complete small orders.

- Registered enterprises serve as intermediaries between small family workshops and foreign customers. They resell product made in neighbouring villages, taking advantage of their legal and financial capacity and of their trade relations to export.

About 4,000 people from neighbouring communes, or sometimes from other provinces, work for Đồng Kỵ enterprises, either at home or in the workshops in this village. More than 2,000 people do not live in Đồng Quang commune, where Đồng Kỵ is located, and have temporary residence papers. There are about 500 people from Chuyên Mỹ (Hà Tây) who inlay mother-of-pearl or trade in mother-of-pearl.

The commune's agricultural land, meanwhile, is cultivated by farmers from surrounding villages.

2) Training and the communication of know-how:

The craft of making traditional decorated furniture was developed by a few Đồng Kỵ craftspeople of repute. At the end of the collectivist period, they had the idea of reproducing traditional furniture for the new Hanoi bourgeoisie and for export to China. Several apprentices have learnt this craft in the commune's workshops; some have then set up business themselves. In addition, during the collectivist period, a co-operative was created in Thiết Ứng (Vân Hà commune, Hà Nội province). It was specialised in sculpture of wood and ivory, and developed symbiotic relationships with several surrounding villages. Several villagers received training to work in the co-operative.

3) Trade relations: Đồng Kỵ is at the centre of a wide network of traders, craftspeople and wood sellers across the Red River Delta, Việt Nam and Southeast and East Asia. It is the biggest market in

the region (wood from Laos, Cambodia, Malaysia). It supplies the craftspeople of the villages in the province, but also in Hà Tây and even in China.

2. There is a division of labour within villages between enterprises, each carrying out a stage of the production process. With the increase in production, mechanisation and product diversification, a division of labour between households and a lengthening of the production chain can be witnessed.

Activities that use scrap materials already involve a long chain of collectors (paper or metal). Several types of craftspeople, having invested in equipment, such as owners of metal foundries, then treat these materials. They sell them in the form of aluminium or copper plates ready for use to those who then cut them up to make cooking pots, trays or gongs (in Đai Bái) or as iron ingots to those who then make them into metal rods or iron bars for construction work (in Da Hội). Craftspeople who do not have equipment at their disposal sell their labour to others and make part of an item. In Minh Khai and Dương Liễu (Hà Tây), households have equipped themselves with machines to rasp cassava or edible canna and carry out the first stage of processing it for producers of starch and rice noodles. Where the production process has been mechanised, each machine makes it possible to produce part of an item, which means that the work is split up into separate tasks. In the case of La Phù (Hà Tây), a village that produces woollen garments, the large-scale enterprises design models, buy the raw materials, receive orders and distribute the work and the yarn to workshops in neighbouring communes who only weave parts of the garments. Sweaters are knitted by several subcontracted craftspeople at home, each using a specific machine: either for knitting the sleeves or the body, and the items are sewn together and finished in the parent company, which has more sophisticated machines.

3. A system integrating family workshops through subcontracting of work by large-scale enterprises specialised in exporting craft products:

- Large, incorporated enterprises accept orders from foreign clients and subcontract these orders to production managers who then redistribute the work to a host of households who only carry out the manual stage of the production process. This type of work management mainly concerns making goods from bamboo, rattan and "te" grass that is mostly manual labour and requires little know-how.

- Large enterprises, located in towns or in big urban industrial zones, that cannot afford to import certain smaller parts from abroad or to make their workers carry out specifically manual labour, subcontract work to specialised craft households in the CIVs. This is the case of some workshops in the hammered brass village of Đại Bái, specialised in making copper accessories, which sign contracts of several hundreds of thousands of US dollars every month with large enterprises. In Thanh Thùy (Hà Tây), a commune specialised in making small metal parts, several households work for large companies specialised in engineering or electronic goods located in Hanoi or in other provinces in the north of the country. Similarly, State-run hydraulic companies get households in Đa Vân (Châu Khê) to make wire mesh baskets that are filled with stones to build defences against river or sea flooding.

B. Clusters with varying potentials

At this stage in our study, we cannot yet determine a typology of CIV clusters. We will however present three examples of clusters in Hà Tây and Bắc Ninh provinces, highlighting factors favourable to their expansion. Some factors appear decisive in characterising and assessing their development potential:

- Production and investment capabilities: available capital, degree of mechanisation, lengthening of the production chain and diversification of production;

- Employment of a large workforce with differentiated and complementary levels of qualification;

- A potential area to be developed in these villages for these activities;

- Innovation and the ability to find new markets: the strength of all great entrepreneurs.

La Phù (Hà Tây): at the centre of a cluster specialised in the production of woollen garments — highly developed division of labour between the central village and the subcontracted satellite villages

1. There are 24 limited companies, about twenty co-operatives and 700 household enterprises specialised in weaving garments from wool (sweaters, socks) or cotton (T-shirts). These enterprises are highly mechanised. There are about 300 looms and 4,000 sewing machines in the commune. Some large enterprises, such as Hung Hien, have invested more than 2 billion dông in their factory. Nguyên Viet Phu has 30 machines for making socks, or about a third fewer than the big companies in Hanoi. In the commune, it is possible to count 15 computerised embroidering machines, 60 knitting machines, 250 machines for knitting socks, 15 packing machines, 8,000 weaving machines and hundreds of other miscellaneous machines. 2. In 2004, it was estimated that there were 7,000 to 8,000 people from outside the commune working for La Phu enterprises. 70% of the workforce from outside the village lives in Tân Hoà and Công Hoà villages (Quốc Oai district). The rest come from the neighbouring commune of An Khanh and those of An Thuong, Dụng La, Dụi Thanh, Tân Phú and Bình Minh (Thanh Oai district). Workers even come from more distant provinces, such as Vĩnh Phúc. Minh Phương Limited Liability Company alone employs 1,000 workers for its factory from the commune and neighbouring communes and subcontracts work to 2,000 households (150 of them in La Phù) that operate from home.

3. Space for production is very limited in La Phù; population densities are higher than 2,500 inhabitants per km². In 2000, an informal craft mini-zone was set up on the site of the former cooperative where the bigger enterprises started increasing the scale of their production. In 2004, the industrial site was not yet operating. A certain number of large enterprises have however procured sizeable plots of land (2,000 m²) that once belonged to the co-operative. Through lack of space, large enterprises have moved much of their production into the subcontracted villages. With the development of the industrial site, large enterprises will be able to increase the scale of their activities and generate a greater capacity for production and subcontracting with the surrounding villages.

4. La Phù is a typical example of a village that became industrialised when economic liberalisation took place. With annual takings of 221 billion *dòng* in 2001, of which 140 billion from exports, La Phù is a village with one of the highest export volumes in Hà Tây pròvince¹. Those entrepreneurs who have

^{1.} Đắc Hữu, 2001 - La Phù, An original craft village in the Red River Delta, in: Craft villages in Hà Tây 2001 - Hà Tây Department of Industry.

managed to increase the scale of their production and become registered are mostly former textile traders or former officials from the co-operative set up during the collectivist period, and dismantled since 1998. They subcontract work to several tens, or even hundreds of households. Medium-sized enterprises selling thread and by-products develop sidelines such as weaving special cloths or making socks with machines. They benefit from a large social network and business contacts at national, or even international, level (in particular with Việt Kiều living in Eastern Europe). These markets are the former commercial contacts that the co-operative had during the collectivist period. They have also managed to break into fresh markets. Some limited companies have teams of designers who create their own models and propose them to customers.

During \mathcal{O} (Bắc Ninh), a village specialised in making paper: a village that has managed to create a vertical structure where enterprises carry out the whole production chains.

1. In 2003, Phong Khê commune had 125 industrial paper production chains with a capacity from 300 to 2,000 metric tons/year. The three big enterprises located in the new industrial site have installed chains with a production capacity of 10,000 metric tons/year. Only the richest craftspeople were able to obtain access to the industrial site: a 50-year lease for a 1,000-m² plot of land costs 260 million *dòng*. The three most affluent entrepreneurs, descendants of the first craftsman to have installed a production chain in the village, own the biggest plots.

2. With the change in scale of business activity and the extraordinary growth in production, the village called upon a

specialised workforce from outside the village, in particular technicians trained by the Bãi Bằng paper mills.

3. The production area has spread with the conversion to toilet paper, Manila paper and typing paper production: the progressively mechanised craft activities have left the heart of the village, too limited spatially. Only *giấy dó* production continues in the familial space and the other villages of the commune. Mechanised enterprises concentrate on the peripheral areas of the village, in two informal craft zones (one of which is situated beside the Ngũ Huyện Khê River) and the 12.6-hectare industrial site, built recently by the province. Following the abolition of firecracker production in 1994, the most dynamic entrepreneurs benefited from the public authorities' real desire to help craftspeople switch to another activity: greater ease in changing the status of agricultural land, financial support and help with retraining. These new craft production areas are located near roadways and waterways, for draining off wastewater.

4. Industrialisation in Dương Ổ took place thanks to a technology transfer and an existing division of labour in a village already open to the outside world. The desire to improve production quality and diversification and to make economies of scale explains the rapid development of this village whose craftspeople, fifteen years earlier, made $gi\hat{a}y \ do$ by hand. Numerous entrepreneurs have taken advantage of training given by Chinese companies that sell them machines or training courses in the Hải Phòng mills. The instigators of mechanised production bought up the machines from bankrupt co-operatives or SOEs when economic liberalisation began. On the industrial site, the three biggest enterprises use a closed system to process recycled wastewater.

5. The market is very unstable and entrepreneurs must adapt and change products quite frequently, as competition is very stiff. Access to raw materials is therefore decisive in the entrepreneurs' choice of making one type of paper or another. Many people wish to improve paper quality, but they lack funds to invest in new machines and space in which to install them.

Phú Nghĩa cluster (Hà Tây), specialised in making bamboo and rattan goods

• A traditional activity that took off during the collectivist period, thanks to the establishment of a co-operative and access to Eastern European markets;

• Enterprises that have managed to adapt to economic liberalisation and move into international markets;

• Products mostly aimed at the export market;

• A very manual activity that owes its dynamism to a marked division of labour and subcontracting of work to family enterprises;

• A high level of specialisation in villages that make bamboo and rattan goods: the only way to avoid competition;

• A very poorly-paid activity, with an uncertain future, but suited to village life and to the agricultural calendar;

• A lack of space for an activity needing large drying areas.

Strategies of the most dynamic entrepreneurs and public policies adopted to develop industrialisation of rural areas

1) Extension of the craft and industrial productive area

During the 1990s, in villages that had made a start at mechanising their production process, or had increased their scale of production thanks to access to international markets, the most dynamic craftspeople, with the help of the local authorities, set up new production areas where room could be found for them (beside dykes and roads, on the sites of former co-operatives or administrative buildings, or in places where ponds had been filled in). In order to solve these problems of space, the provincial People's Committees, at the request of CIV craftspeople, took steps to convert the status of agricultural land into land intended for industrial production and establish informal craft mini-zones set aside solely for the commune's craftspeople. During Ô papermaking village is a model case. In 1994, after the State outlawed the making of firecrackers, enterprises had to switch their production to other types of paper (typing paper, toilet paper and wrapping paper), activities requiring a mechanisation of production and therefore more space. The provincial and communal People's Committees adopted a whole battery of laws to make access to land easier for craftspeople, in a country where paddy fields are sacred and where the status of agricultural land is not easily changed.

Then in the 2000s, the provincial People's Committees enacted laws to create industrial sites in the most dynamic communes. Currently, Bắc Ninh province is in the process of planning and building 18 industrial sites (ISs) for craft and multi-craft villages (CIVs), this on 375.66 hectares of land for development (an investment of nearly 200 billion *dòng*).

- The creation of ISs serves a fourfold purpose:

+ To increase the production area and the size of the workshops in the process of being mechanised and to create the conditions for highly mechanised enterprises to set themselves up there;

+ To diversify production. On the Đa Hội IS, it is possible to carry out all stages of metallurgical production. It was not previously possible to install large-capacity metal furnaces, as there was not enough space away from dwellings;

+ To reduce environmental and public health problems by relocating polluting enterprises from the village to the outskirts;

+ To resolve the isolation of enterprises located far from roads.

- The criteria for creating an IS:

+ Possibility of converting land where craftspeople wish to create the industrial site;

+ Assessment of whether the village's craft has any future;

+ Action based on craftsmen's actual requests;

+ Symbiotic relationships with local villages thanks to the industrial site's location.

2) Investment and training assistance

At the beginning of 1998, Bắc Ninh set aside part of the priority funds for non state-owned enterprises conducting activities in CIVs to enable them to invest in the renovation of their equipment. In addition, the province encouraged local banks to lend capital to entrepreneurs, derived from various subsidy sources. 11 investment programmes were set up to improve technology of enterprises in CIVs. In 2002, a six billion *dòng* subsidy was paid out for the building of infrastructure on eight industrial sites in CIVs.

The provincial People's Committee nominated the Departments of Labour, Social Affairs and Industry to establish the vocational training programme for craftspeople in CIVs.

In Thanh Oai (Hà Tây), several CIVs specialised in making firecrackers have taken advantage of retraining programmes organised by the district authorities since 1994. Relatively simple crafts such as making bamboo and rattan goods have been widely taught, thanks to the know-how of Phú Nghĩa craftspeople.

3) Policies to improve conditions for export and import of raw materials, particularly wood, as well a lowering of certain taxes, have been enacted to help craftspeople expand their businesses.

A three-speed production space was established:

- On the industrial sites, enterprises in the process of modernising have reached a rate of production comparable to large incorporated companies in the State-owned sector, private sector. They produce at lower costs than these others and have established niche production of secondary-quality products. They consume more and more space and energy (in Đa Hội, the monthly electricity bill for enterprises on the industrial site comes to between 60 and 100 million VND). Their investment to set up business on the IS in the papermaking village is from 2 to 10 billion VND.

- Enterprises that are beginning to mechanise have set themselves up on the outskirts of residential areas, along dykes, on the site of former co-operative buildings or of ponds that have been partially filled in.

- In residential areas of villages, only manual activities or those using small-scale equipment are maintained. Family enterprises, with low investment capacity, mostly use the family workforce or pay for piecework and carry out mainly subcontracted work. In spite of the deafening noise of some workshops (metalworking, papermaking and textiles), these activities are tolerated. Workshops do not operate at night, unlike those on the ISs.

The rapid growth of enterprises on the ISs has however reached its limits, owing in particular to the difficult economic climate: competition with China and between mechanised enterprises in the area, the rapid increase in raw material prices (it is becoming more and more difficult to import wood or to buy scrap metal) and the high cost of borrowing. Several enterprises in the papermaking sector, for example, no longer wish to fall into the cycle of production and debt to banks, since the market is overcrowded and prefer to maintain a smaller scale operation within the village.

On the other hand, in the metalworking for construction sector, which is experiencing marked growth owing to property speculation and the spread of towns and cities, the Da Hội enterprises are desperately seeking fresh land to increase their production capacity. The 13-hectare industrial site has been very rapidly occupied and entrepreneurs estimate that they require a further 60 hectares to meet their needs for space.

It is difficult to set up an industrial site in a village where the craftspeople lack financial resources. In Dai Bái, craftspeople who have requested a plot of land on the IS take a long time to set themselves up. In 2006, two years after its completion, only ten or so of the 168 enterprises registered there had built workshops. Lack of funds, being obliged to respect the construction norms imposed by the Management Committee, having to mortgage homes to obtain funds and the length of administrative procedures to be followed in order to borrow money impede the installation process. Craftspeople can only increase their scale of production and mechanise enterprises to absorb the higher production costs on the IS in a favourable economic context where they have control over the upstream and downstream of the production chain. At the beginning of 2006, raw materials were very expensive, owing to strong Chinese demand for scrap metal. Some craftspeople halted production, waiting for the situation to improve, as they could not fulfil orders that were based on lower prices for raw materials. It should also be noted that a few craftspeople began speculating and resold their plots of land!

As well as the ISs, bigger industrial zones managed by the Provinces have been built near medium-sized towns or along main roads. In Bắc Ninh, they house large industrial enterprises, either State-owned or private and foreign-owned. They create an industrial environment favourable for the development of smaller enterprises in clusters to which they sometimes subcontract part of their production process. In Hà Tây on the other hand, it is difficult to build ISs only for craft enterprises, as these lack the means to buy plots of land; industrial zones receive both craft enterprises and large enterprises from the towns. The latter are interested by the lower costs of land and labour. However, although the creation of large enterprises near craft villages makes it possible to partially resolve the chronic underemployment of inhabitants, it worsens environmental problems in an agricultural area poorly equipped to dispose of polluted wastewater.

Rapid industrial growth in a very densely populated and fragile area: the challenges to be met for better planning in rural areas of the Red River Delta

Rapid development of craft and above all industrial activities has generated rapid growth in production, an increase in the production area and employment for many villagers underemployed by agricultural activities. According to a 1999 World Bank report, CIVs account for 41% of GDP in the industrial sector and use 64% of the labour force in the non-State industrial sector. The growth rate of craft and rural industrial production has been up to 9% annually since the end of the 1990s and exports topped US\$ 600 million in 2003.

Some village clusters, driven by very dynamic CIVs, exert an attraction over a wide area with a large labour force. The landscape of the most dynamic villages is much changed; on average, families in these villages have incomes four times higher than those in agricultural villages. Salaries range between 500,000 VND and 2.5 million a month, depending on tasks and types of products. Craftspeople's standards of living have clearly

improved and many have invested in modernising their homes. Villages are becoming denser and enable more people to live in them, thus avoiding migration towards towns and cities or to other productive regions in Việt Nam.

The environment

Rapid development of some clusters has led to serious environmental and human health problems. In this densely populated delta region, agricultural land is crisscrossed by a hydraulic network, interwoven into the craft production area. While hydraulic infrastructure was designed and modernised at the communal level with the aim of supplying agricultural production and protecting the population from flooding, the hydraulic network has been partly subverted from its intended function. Some watercourses and ponds used for irrigation or fish farming have become little more than open sewers for the craft and industrial enterprises that set themselves up close by, whenever possible. In the absence of separate drainage networks for agricultural and industrial wastewaters, the pollutants produced by CIVs are spread and deposited in watercourses and then onto the agricultural land of neighbouring villages.

Water pollution from some CIVs (paper, metal, textile producers, etc.) contains very high levels of heavy metals, acids, coliform bacteria, etc. (Digregorio, 1999). The smoke from coal-fired pottery kilns and metal furnaces disperses dust into the air that is bad for villagers' health. Women who work with metals develop serious gynaecological illnesses, children suffer from malformations and the whole population suffers from respiratory diseases.

Small rural enterprises pollute less than big factories, as they use recycled raw materials that need less treatment with chemical products, and consume less energy. However, the fact remains that as there are many of them, both spaced out and located in village centres, they spread pollution more widely (Digregorio, 1999).

The proliferation of family craft enterprises, operating individually without capital to invest in water treatment systems, the lack of space to spread production out geographically and make it more conducive to human health, the lack of co-operative and community authorities to make it possible to develop overall waste management strategies, the pollution of rivers located downstream from Hà Nội by the capital's factories and by the sewers that pour directly into them: these are all factors that threaten the future of such activities. Some enterprises that consume large volumes of water (metalworking and papermaking) have drilled artificial wells that in the long term may cause subsidence in a delta that is already subject to flooding. The large papermaking enterprises have had to install very expensive closed systems to recycle wastewater, as artesian wells no longer meet their needs. In this way, they discharge very little wastewater into waterways and pollute irrigation water much less than small enterprises.

Despite the projects for water treatment by local authorities within the context of ISs, no system is yet operational in the villages studied. The low investment capacity of most family enterprises and lack of awareness about environmental problems among registered entrepreneurs, in particular pollution of rivers and canals, may well endanger the future of some activities and create serious problems in the agricultural sector. Building tall chimneys to disperse smoke harmful to human health high into the air is not an option for small-scale craft enterprises.

Management of industrial sites

The problem of management and granting of prerogatives to local authorities is the cause of several malfunctions of ISs. Usually, communal People's Committees look after public security, civil and social affairs, and land management. They have no prerogatives concerning water management, electricity, refuse collection or taxes, as all these responsibilities lie with the districts' specialised services. There are no competent personnel among communal People's Committees, which are elected bodies, to assume responsibility for technical duties.

Attempts to remove polluting craft activities from the centre of villages have not been a great success: craftspeople build large houses on the ISs, sometimes claiming that they are offices and accommodation for their managers. Lack of space in the centre of villages leads richer craftspeople to enlarge their dwelling on the IS, even though this is forbidden. They sometimes continue the subsidiary activity in the former workshop in the village centre, maintaining a high level of pollution. The flood of new families has made demographic densities on the ISs rise far beyond what was planned, creates stress on water and electricity resources and generates the need to establish refuse collection services. Nothing has been done yet to resolve these issues, creating numerous day-to-day management problems.

These ISs are usually created on rice-growing land. Compulsory purchases from farmers and awarding compensation are complicated and costly operations. In highly industrialised villages, such operations are easier, as families no longer rely on agriculture to make a living. In more traditional villages where craft activities are a secondary occupation for most families, these operations take more time to complete.

Lack of space in still traditional craft villages and improvements to power and water supply

The residential area in the middle of a village is limited and cannot accommodate activities needing a lot of space, particularly machinery, which creates a problem for modernising the activity. One study (Digregorio, 2001¹) carried out in the metalworking village, Da Hội, showed that residential density had reached 19,396 inhabitants per square kilometre (194 inhabitants/hectare). To this had to be added the 2,000 non-residents who worked there during the day, giving a density of about 25,000 people per square kilometre, or an average density identical to that of urban districts in Hà Nội (26,000). Before the IS was built, 85% of workshops were installed in the residential area and had an average size of 185 m².

In villages making bamboo and rattan goods and those where there are producers of foodstuffs (rice noodles, starch, etc.), craftspeople lack space to dry their produce. In the wet season, production is slowed down significantly. As these activities are not very profitable, they can only be carried out in villages with drying areas, such as those located along dykes, or are limited to sections of the village with pieces of waste land or family homes with large courtyards.

Water: some activities require large volumes of water, to keep machinery cool, as in the case of metalworking, or to soak raw materials (bark, fibres and bamboo) as for making rattan and

^{1.} DiGregorio, M. (2001). Iron works: Excavating alternative futures in a northern Vietnamese craft village. Unpublished dissertation. Department of Urban Planning, University of California, Los Angeles.

bamboo goods or papermaking. Infrastructure for water supply is not sufficient in some villages.

Power supply: the supply of electricity to villages is sometimes inadequate. It is insufficient to make equipment work and undergoes frequent cuts or dips in voltage. Even on the most modern ISs, electrical power fluctuates.

Labellisation of craft products: the only way to guarantee improvement of quality and limit competition

The fierceness of competition between villages specialised in the same products has worsened with the growth in number of CIVs and the increase in their production volume. Some dynamic villages have managed to develop an activity originally instigated by a neighbouring village that, being unable to adapt to the fresh production and marketing context, has had its market share "stolen". A village with a tradition of trading, like Dong Ky, is symptomatic of this phenomenon. Some of its craftspeople even claim that they "stole crafts" from joiners, sculptors and mother-of-pearl inlayers in neighbouring communes.

In the ceramics sector, the famous village of Bát Tràng, which is very well integrated into trading networks, is looking for fresh types of pottery to sell. A certain number of craftspeople-traders from this village sell artistic pottery of the kind made in Phù Lãng, a village in Bắc Ninh province that has serious problems marketing its produce. They buy clay in Phù Lãng, employ craftspeople from this village and get them to produce Phù Lãngtype ceramics. They then claim that these are items made in Bát Tràng and sell them for three to four times more than they would have made in Phù Lãng. To encourage bolder and more creative craftspeople to innovate, their know-how and the quality of their produce should be protected. The idea of quality-labelling some craft products is beginning to catch on and already interests the Trade Departments of provincial People's Committees. However, this project is encountering the numerous obstacles inherent in the low qualification level of most craftspeople, with for the most part a small scale of production, and the decision to prefer quantity to quality, more profitable in the short term.

To register a quality-label, technical specifications must be respected, namely criteria of quality and the technical processes to be followed. This requires craftspeople who have mastered techniques. However, there is not yet an institution or an association capable of assessing product quality. The few existing associations of lacquer, paper or furniture producers bring together craftspeople who are often in competition. The very variable origins of raw materials also make difficult any assessment of the quality of the finished product and the monitoring of the technical specifications associated with the application of a quality-label.

For some talented craftspeople, the quality of work must first be improved and then quality-labels imposed. This is a long-term project, as the awareness of craftspeople must first be raised.

Vietnamese Studies

43rd year

N°3-2007 (165)

Index 12,192

VIETNAMESE STUDIES Review founded in 1964 by Nguyễn Khắc Viện

Chairman of the Advisory Board: Hữu Ngọc Editor-in-chief: Trần Đoàn Lâm

Editorial Office:

46 Trần Hưng Đạo Str., Hà Nội, Việt Nam.

Distributor:

- Xunhasaba, 32 Hai Bà Trưng Str., Hà Nội, Việt Nam.

- Vietnamese Studies, 46 Trần Hưng Đạo Str., Hà Nội, Việt Nam.

Vietnamese Studies

43rd year

Nº3-2007 (165)

Index 12,192

The development process of craft and industrial village (CIV) clusters in Hà Tây and Bắc Ninh province: from village initiatives to public policies Sylvie Fanchette

> A journey to some traditional craft villages *Hữu Ngọc*

Review of the researches in Việt Nam on the Duy Tân Movement Nguyễn Văn Khánh, Trương Bích Hạnh

Place of sociology in the new socio-economic context of Việt Nam: viewpoint of the experts responsible for the discipline *Trịnh Văn Tùng*

> The revival of a desert region *Dam Thu*

FILE ON VIETNAM

Note de lecture Légende des siècles (De Hugo au Vietnam) *Janine Gillon*