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ince the 1970s, the fringes of large Asian cities have experienced many changes, associated with the process of metropolisation (foreign investment in industry, roads and housing infrastructure) and with movement towards the new places of production, namely the industrial parks. Migratory flows emanating from underprivileged areas head for the outskirts of the city or the surroundings of industrial parks where a low-cost rental market is developing in urbanised villages.

In Vietnam, since the economic liberalisation of the 1980s, rationales of distribution of settlement have changed: restrictions on people's mobility were lifted, engendering a rural exodus, individual initiative has been embraced and enabled the development of a very active informal economy that demands high levels of workforce in peri-urban countryside, particularly in craft villages and those specialised in market gardening.

Thanks to the major hydraulic works of the 1960s-1970s, drainage and flood protection have been improved and rice-farming systems intensified. The multi-activity and multiple uses of land provide rural households with the means to remain in their already very densely populated villages.

*In situ* demographic growth is added to by migrations originating at once from the countryside and from town

centres. In Hà Nội's surroundings, dormitory villages develop rapidly and present expropriated villagers with ways of making money. These villages undergo rapid change and suffer serious social problems caused by the difficulties of housing and integrating migrants, young for the most part, with limited resources.

The large-scale building sites of the capital being developed into a metropolis attract many illegal and temporary rural migrants who, without any official status, do not benefit from social services and constitute a class of 'floating' migrants that is difficult to measure city-wide (GUBRY *et al.*, 2011), but that some observers estimate to be 15% of the total population (PAPIN & PASSICOUSSET, 2010).

Unlike Indonesia, where veritable villages of migrants are built near industrial zones, the *squatter-kampong*, which look much like shantytowns, in the Red River Delta, migratory movements are on a more modest scale and lead to dormitory villages, or to temporary building sites where construction workers set up camp while projects are ongoing.

In addition, with the densification of city centres and the verticalisation of buildings associated with the expansion of the service sector in globalised central business districts, land prices have soared and low-income populations are pushed out

to make way for large-scale urban projects. We are witnessing a removal of people from city centres towards the outskirts, particularly towards urbanised villages that also receive rural migrants.

Simultaneously, a movement that cannot yet be quantified in the surroundings of Hà Nội, but that is widespread in the examples of Jakarta, Bangkok or Manila, results in migrations of the middle classes from city centres towards the new urban areas, some of them made up of gated communities.

Towns and cities now represent a driving force in the development of the economy and attract foreign investment and an under-employed rural workforce, while the peri-urban countryside strengthens its relations with the city, forbidden during the collectivist era, while diversifying its activities along with short and temporary movements of population. Industrial parks are built along the main highways, and play their part in industrialising the countryside and transforming a landscape previously distinctive for small-scale industry and craftwork.

Symbol of integration into the global market of a country in economic transition, these industrial parks benefit from land and fiscal policies that are very preferential to foreign investors. Small and medium-sized businesses funded with domestic capital are gathered together in industrial zones of variable sizes, particularly in the peri-urban fringes where the most polluting businesses have been relocated.

This concentration of investment in the metropolis, in the city centre, in urban development corridors and along the main highways, generates complex movement of people, made up of permanent, temporary and alternating migrations, for the most part irregular, as they are not recognised by the state. Industrial work contracts are short-term, limiting the integration of workers into their adoptive regions and it is difficult to measure these migrations locally.

Analysis of demographic dynamics through the results of the 2009 census at communal level shows the polarisation of the capital but does not make it possible to grasp the local demographics of fresh industrial installations in the province. However, the cartography of hubs of industrial workforce, of areas of intensive market gardening and the intensity of inter-village relations suggests that a wide array of economic opportunities relies upon *in situ* urbanisation, while local studies show to what extent strategies are being developed for maximising space, optimising use of prohibitively-priced land and obtaining access, sometimes illegally, to further land to use for production.

## Demographic dynamics reinforcing the process of metropolisation

#### • High densities spilling out of the urban area

Located at the apex of the Delta, the province of Hà Nội records the highest population densities of the area with an average of 1,926 inhabitants per km<sup>2</sup>. The population of the nine urban districts totals 2.217 million inhabitants, or about a quarter of the province's population concentrated into 5% of its territory. The rural population totals 3,819,842 inhabitants and is spread over communes with an average density of 1,267 inhabitants per km<sup>2</sup> (according to RGP Vietnam 2009).

The province is made up of four different areas of density:

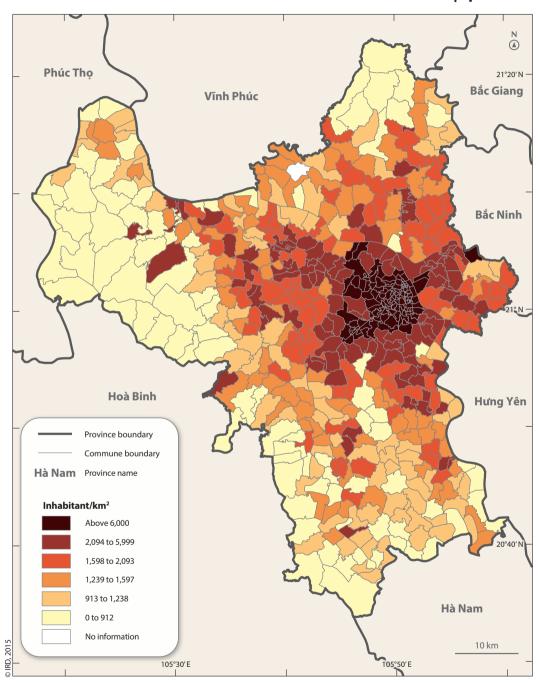
the dense and urbanised heart of the city centre and the peri-centre (densities above 6,000 inhabitants) is mainly located within the bend in the river, on the right bank. It is mostly made up of urban communes or *phường*. The *phường* of the historic centre, Hoàn Kiếm, Đồng Đa and Hai Bà Trung reach extreme densities of close to 35,000 inhabitants/km², while the more recent districts of Cầu Giấy and Thanh Xuân, places of high inward migration, house more than 15,000 inhabitants per km².

The former administrative centre of the province of Hà Tây, the town of Hà Đông, has become an urban district of the province of Hà Nội and has been enlarged with the integration of several surrounding communes, which has now become a *phường*. The historic core of the town reaches densities of the same order as the city centre – 150 to 250 inhabitants per hectare –, while the outlying communes have average densities of 3,000 inhabitants/km². Situated along a crucial artery, Highway 6, the town houses large-scale residential and industrial projects;

– the urban spread around the peri-centre (between 2,000 and 6,000 inhabitants) extends outwards in all directions, but only to a limited degree north of the Red River. Urban densities are highest on the right bank, despite heavy industrial developments and attempts by the state to shift the city to the north (around the airport at Nội Bài) and to the east by creating the urban district of Long Biên in 2003, along the key highway leading to the port of Hải Phòng (Plate 28). Some areas, much defined by the presence of water (lakes or the Red River to be crossed), have average densities of 5,000 inhabitants/km².

Outside this urban sprawl, strings of densely-populated communes spread out to the west in the districts of Thạch Thất and Phúc Thọ in the direction of the town of Sơn Tây, and to the south of the city along the main highways. They correspond to the most dynamic clusters of craft villages that have managed

### Population densities in 2009, commune by commune in Hà Nội province



Source: Census of Population 2009, GSO. Design FANCHETTE S.

to attract and retain a large working population. In addition, the administrative centres of districts pepper the map with centres of high population density. These communes account for 17.2% of the population within 12% of the territory;

– an area of densities slightly higher than the rural average (1,226 to 2,000 inhabitants/km²) surrounds the urban sprawl and the strings of clusters, and corresponds to the Dáy River Valley, with fertile alluvial land and favourable conditions for development of craft villages (river traffic, land suitable for growing mulberry trees for silkworms, and sugarcane).

In the 1930s, these areas were already reaching unimaginable densities as high as 800 inhabitants/km² and were the site of a flourishing textile industry. These areas are the most active in terms of urbanisation of the countryside. They contain 23% of the total population within a territory corresponding to 28.3% of the province's total. They are partly located in the green corridor that the master plan to 2030 seeks to maintain for reasons of flood risks.

- an area of lower densities than the rural average, corresponding to the mountainous and hilly areas of Ba Vì to the west, Sóc Sơn to the north, the areas of contact with the mountains of Hòa Bình to the southwest and the low-lying ground difficult to drain in the south, where it was impossible in the 1930s to grow rice in the 10<sup>th</sup> month because of the land being under water (GOUROU, 1936).

Here and there, communes of lower density also exist that are mixed into the heart of very populous areas, to the south of the capital, and correspond to localities with limited access, low-lying, where only a few villages were able to settle on levees of the Nhuệ River and which are isolated by an intricate network of canals and rivers that divide up the space. They total a fifth of the province's population within a little over half of its territory (52.6%).

### • A double process of in situ and exogenous urbanisation

Vietnam has completed its demographic transition begun in the 1990s and its mean annual rate of growth reached 1.2% between 1999 and 2009, a decrease compared to the previous census period (1.7%). The Red River Delta has a low growth rate of 0.9%, when compared with the southeastern region of Vietnam, dominated by the economic capital of Hồ Chí Minh City (3.2%). Although the Delta's migratory situation remains modestly positive (22,402 migrants between 2004 and 2009), differing demographic dynamics can be observed from province to province.

The process of metropolisation is speeding up in favour of the new enlarged province of Hà Nội, which recorded an annual demographic growth of 2.2%

between 1999 and 2009, with a migratory surplus of 292,426 people (between 2004 and 2009). This growth mainly affects peri-urban areas and hubs of industrial workforce where demographic densities are highest (Plate 29).

On the other hand, in the south and the extreme west (Ba Vì Mountains), mean annual rates of growth are very low, or even negative. Between the two, in a radius of 20 km from the city centre, in fact in the flood-prone area of the Đáy Valley, growth rates are very slow and lower than the national average. In the north of the province, where Nội Bài Airport is located, only a few communes record high rates, such as those of the industrial zones of Quang Minh, Thăng Long and Sốc Sơn.

To the west, in the vicinity of the Hòa Lạc Science and Technology Park, the communes, in a turmoil of construction and projects, record high rates of growth: the attraction of workers to building sites seems to be the main cause of this, given that the factories of the technology park are not yet fully active.

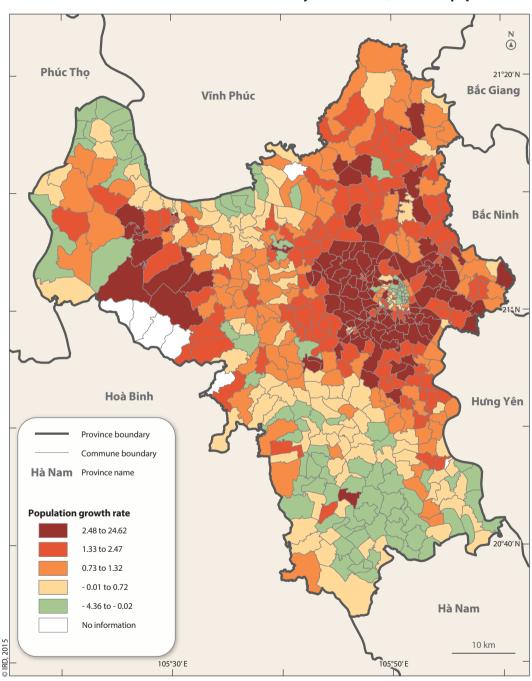
Several phenomena can thus be observed.

• A process of metropolisation and attraction of peri-central areas (urban districts and the first ring of rural districts) as shown by the dark brown patches around the city centre with a radius of about 10 km and a lighter one on the outer periphery.

Two processes are at work here:

- the removal of city centre inhabitants to other urban districts and neighbouring rural areas: the urban district of Hoàn Kiêm is losing population in absolute terms (- 1.1%) owing to the forced de-densification of the Old Quarter with its very high density (823 inhabitants per hectare). 6,000 people must leave this neighbourhood by 2020 so that densities reduce to 500 inhabitants per km². The other central urban districts have a rate barely higher than the national average (1.2%). This process can be partly explained by the expansion of the service sector in these neighbourhoods in face of very rapid increases in land prices;
- the rural districts that acquired urban status in 1996 and 2003 are becoming a favoured migration destination. Land prices are lower than in the city centre and plots for construction bigger. Two kinds of housing are on offer there: highend and medium range KDTMs (see Chapter 5) and very low-end dwellings and rooms for workers and students (see below). Thus the western outskirts of Hà Nội record the strongest levels of growth, as much in the urban part of Hoàng Mai and Cầu Giấy (respectively 7.2% and 6.3%) as in the rural district of

### Population growth rates between 1999 and 2009, commune by commune, in Hà Nội province



Source: Census of Population 1999 and 2009. Design FANCHETTE S.

Từ Liêm: 7.4%. Large-scale residential programmes have been installed in the surrounding communes of urban districts (Mỹ Đình, Cổ Nhuế and Phú Diễn) that record growth rates of over 10% annually.

To a lesser degree, the other communes receive low-income migrants, to whom the villagers expropriated of their land for urban and industrial projects have become landlords. Further to the south, in the urban district of Thanh Trì, the villages have become denser with the arrival of many Hanoians, professionals or workers having purchased houses (see Chapter 3) or students and workers of industrial zones who rent out rooms.

• In the rural districts of the peri-urban area, we are witnessing a slowing down in demographic growth that is happening more rapidly than the national average. In the communes of the former province of Hà Tây the mean annual rate of growth between 1989 and 1999 was the same as that of Vietnam (1.67/1.7). During the following census period, it slowed down to 0.77 yearly compared with 1.2% at the national level.

If one looks more closely at the figures, one notices that:

- the peri-urban districts where the process of metropolisation is rapid (roadbuilding, residential and industrial projects) record mean annual rates of growth equal to or above the national average, but are way down when compared with the previous period. They correspond to areas of very high densities;
- at the communal level, craft villages with more than 1,000 artisans have, in many instances, recorded a rapid rate of demographic growth during the period 1989-1999 (on average 2.23% yearly), which corresponds to the beginning of  $D\delta i \ m\delta i$ , a period during which craftwork was galvanised by the liberalisation of markets and the development of individual initiative. These villages have built up small concentrations of workforce, stabilising many migrants and limiting the exodus of villagers. However, since the 2000s, their mean annual rate of growth has been falling rapidly (0.83%), or they have even sometimes actually lost population in absolute terms. This shows the unsustainable nature of craft industry economic dynamics in a context of economic competition with the modern sector, of pressure on land and of the uncertainty of markets.

However, given that the census does not record temporary migrants, it is difficult to comprehend more precisely the attraction of small centres of workforce and industrial zones particularly in times of uncertainty and economic crisis. The young labour force (18-24 years), of rural origin, comes from the provinces of northern Vietnam or from the very populous south of the Delta. Migrants work according to the seasonal nature of craft activities.

Finally, the communes of the outer rim of the city, particularly those south of the districts of Phú Xuyên, Mỹ Đức and Ứng Hòa, continue the gradual decline of their rates of demographic growth already begun between 1989 and 1999. Most of the communes of these districts record negative rates. During the preceding period, some communes had experienced very high demographic growth, owing especially to service activities (tourism around the Perfume Pagoda at Mỹ Đức) or polarisation of large villages or small towns.

### Industrial development from the informal to the formal

These changes in distribution of settlement and the agglomeration of population in the first and second peri-urban rings are accompanied by a reduction in absolute terms of the population working mainly in the agricultural sector. Between 2002 and 2008, the Vietnamese agricultural sector recorded the biggest decline in the number of jobs in the Red River Delta, falling from 50.1 to 38.6% of the active population (NGUYĚN HỮU CHÍ, 2012).

Contrarily, jobs in non-agricultural private sector businesses recorded an annual growth of 26.9% during this period. The informal sector is the one generating the most employment. It is closely followed by businesses with foreign capital investment that represented 44% of non-agricultural private sector employment in 2008 (NGUYĚN HỮU CHÍ, 2012). Foreign investors are interested in the Red River Delta owing to low salaries, easier access to land at low prices and the proximity of China, one of Vietnam's favoured economic partners (Ishizuka, 2011, quoted by NGUYĚN HỮU CHÍ, 2012).

Between 1990 and 2006, the contribution of industry to GDP rose from 23 to 42%. Annual growth of employment in industry has reached 7% yearly since the beginning of the 2000s. Since its enlargement, the province of Hà Nội has 28.3% of its Economically Active Population (EAP) (+15 years old) who work in industry (GSO, Labour Survey 2010), a higher figure than the national average (21% according to the VLSS – Vital Living Standard Survey – of 2011). The primary (resource) and tertiary (service) sectors represent respectively 25.8% and 45.9%.

Jobs in industry, totalling 620,672 (*Hanoi Annual Statistical Survey*, 2008) are spread over four sectors of variable dynamism:

 state and public enterprises (92,951 jobs, or 15%), a sector in steep decline in spite of considerable subsidies;



Photo 11

Villager on bicycle riding along a motorway

- private national companies (174,023, or 28%);
- family businesses (244,571, or 39.4%), most of which are situated in craft villages and are informal;
- the private sector with foreign capital investment (104,517, 16%) is growing rapidly.

The general population census of 2009 gave the urban/rural detail of jobs linked to craftwork and industry: craft workers, labourers and industry technicians represent 25% of the total (EAP) (agricultural sector included) with a distribution between the urban and rural sectors of 21% and 26% respectively. This shows the very sizeable share of the craft-industrial sector in the rural

economy and its relatively small share in towns, more and more oriented towards service industries. Factories are relocated to rural peri-urban areas where there is already a strongly developed craft sector, which assembles 17% of rural jobs. The communes where more than half of the workforce is employed in industry are dispersed in the province, without any particular metropolitan rationale (Plate 30). Employment of workers in craft villages could explain this dispersion.

Within the framework of transition towards a market economy, and of its integration into the World Trade Organization, Vietnam counts on foreign investment to develop its economy and particularly its industry. Although growth in informal employment for industry and construction has been high (44% between

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2007 and 2009), (NGUYÉN HỮU CHÍ, 2012), Vietnamese state industrial policies mainly support the foreign investment sector.

Consequently, industrial parks, *Khu Công Nghiệp* (KCN), have developed rapidly. There are 19 of them covering 7,526 hectares, eight of which are operational and the others in the process of being developed. 350 companies have set themselves up for business in these parks. On a macroeconomic level, company performances are very satisfactory for the authorities: they produce 40% of the province's industrial worth and in 2010 they employed an estimated 102,573 workers (Vũ Quốc Bình & Nguyễn Sỹ Hiền, 2012).

However, if one examines the local impact of these industrial parks on issues such as the job market, land use and social change, the success of these performances appears more mixed.

• To begin with, *about 70% of workers in industrial areas are from other provinces* (*Le Courrier du Vietnam*, 27/11/2011). Migrant workers apparently represent 80% of the labour force active in Vietnamese industrial parks, while 60% of this population is made up of temporary migrants <sup>1</sup>. Although, according to the texts governing expropriations, local workers are supposed to be favoured by the companies operating in these industrial parks, in reality, they directly employ very few expropriated villagers.

There are several reasons for the failure of these enterprises in industrial areas to employ local labour:

- foreign invested enterprises (FIEs) prefer to employ young people aged from 18 to 25, or up to 30 for some, and mainly women (60%). Expropriated farmers aged over 30 are not easily integrated into these companies. The method of workforce recruitment by brokers targets people from outside the recruitment area, unfamiliar with the sharp practice of these intermediaries. It is very often the case that these brokers force job seekers to pay them very large sums (a third or even half of their salary). Former migrants, they possess a wealth of information on employment opportunities in the industrial parks in the province and look for candidates among the inhabitants of their home villages (Đô Quỳnh Chi & Trần Thanh Hà, 2008);
- company bosses prefer to employ young people from elsewhere, reputedly more submissive and with fewer contacts between themselves to avoid development of social movements;
- lastly, some of the villagers from the site refuse to work in foreign factories where salaries are very low (sometimes less than the legal minimum wage), along

with very demanding work rates and unpaid overtime. The press reports many cases of companies encountering difficulties in finding workers, and especially in limiting the very rapid turnover of the workforce, as workers seek better work opportunities elsewhere.

However, although enterprises on these KCNs employ few workers locally, they do have a trickledown effect into the service sector (catering, rental of rooms to workers, various other services).

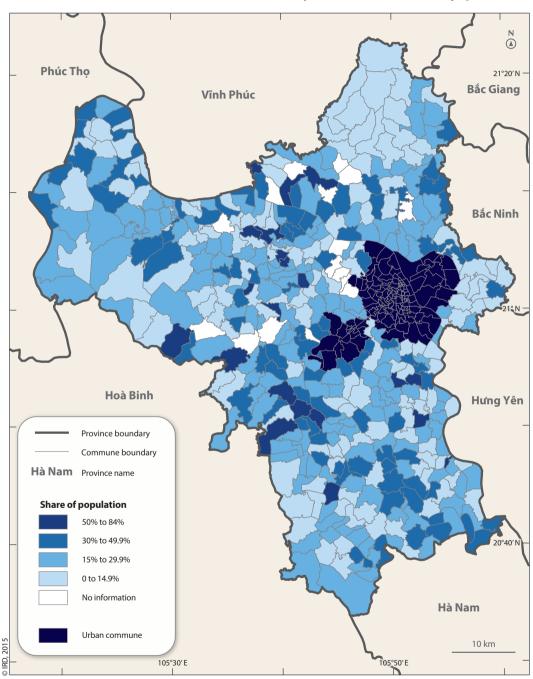
- In addition, in an already very densely populated residential space, the arrival of young migrants creates pressure on housing. Most industrial areas do not provide housing for their workers. Among Hà Nội's eight industrial parks in operation, out of 110,000 workers employed, only 16,300 are housed on site (Vietnam Investment Review, 31/10/2011). When building industrial areas, project managers did not factor in the land needed to house their personnel. Few building companies are interested in low-profit constructions of this kind. Expropriated villagers switch to renting accommodation for workers, often very basic, but considered as very expensive for these low-paid workers.
- Land expropriations by these KCNs are significant (between 200 and 400 hectares) in relation to communal land. With metropolisation and the slow process of freeing up land for developers owing to conflicts, the pressure on land has pushed up prices, making them prohibitive for small companies, particularly given the lack of political support from local authorities. In fact, KCNs have privileged access to industrial land (tax breaks, etc.), in contrast with local enterprises, not judged as consistent with the country's modernisation.

Overall, industrial parks have an occupation rate of 46% (ĐặNG HÙNG VÕ, 2012), while some, for lack of investors, have yet to be built. Once land has been expropriated, its use is blocked for years on end, even though there is strong local demand on land for production. Some tracts of land have been illegally replanted by farmers, while others lie fallow for years, owing to the dismant-lement of the hydraulic system rendering them unsuitable for agriculture.

The map of the three kinds of industrial areas (Plate 31) shows the various installation rationales of types of company and their distribution in the province.

 In 2010, 44 communes in the province housed KCNs in operation or under construction. They are situated along major roads, ideally motorways and highways giving access to Nôi Bài airport or the port at Hải Phòng, without any

### Share of economically active population in 2009, commune by commune, in Hà Nội province



Source: data from the Hà Noi District People's Committee, 2009, provided by Lê Văn Hùng from Casrad (Center for Agrarian Systems Research and Development). Design Fanchette S.

other economic strategy (consolidation by kind of activity or compatibility, presence of a source of workforce or know-how...) other than accessibility. They obey the rationale of metropolisation, the role of transportation in urban structuring and top-down initiated planning, without any thought for local economic realities.

- The Cum Công Nghiệp (CCNs) are dispersed among about sixty communes. Their size is theoretically less than 75 hectares and they are usually situated on a single commune. They usually house large companies relocated from the capital (because of pollution), and small and medium-sized enterprises, usually Vietnamese. They are mostly located along major roads. A quarter of these areas are set up in craft villages and house both local enterprises specialised in the village's activity and companies from outside. 26 are currently in operation and 33 are being built or awaiting the arrival of companies. They employ the local population more readily, particularly those among the first wave created by the state<sup>2</sup>.
- The *Diém Công Nghiệp* (DCNs), or craft industry sites, are rarely bigger than 15 hectares and in most cases are set up in the communes of craft villages. Designed to remove the most polluting enterprises from central locations in villages, they are sometimes established away from major transport routes. They enabled mechanised workshops to extend their production space. Although the first generation of DCNs built at the behest of local authorities at the beginning of the 2000s enabled several workshops to develop their operations at affordable prices, since around 2005, land speculation and the refusal by farmers to allow themselves to be expropriated at low prices and without land compensation, have slowed down the process of creating DCNs. In the 176 DCN projects approved by the Ministry of Trade and Industry for the province of Hà Noi over an area of 1,295 hectares, only 49 have been established (470 hectares) of which 37 in craft communes.

A comparison between maps showing the situation of industrial parks (KCNs), industrial areas for small and medium-sized enterprises (CCNs) and craft industry sites (DCNs), along with that showing the population economically active in industry and craft villages, leads us to several conclusions.

- The presence of KCNs does not have a systematic impact on industrial employment in communes where they are established, with workers meant to register in the village (something that many migrant and seasonal workers do not do). This is the case of communes where the industrial areas are established, apart from Quang Minh and Chi Đông in Me Linh, for which we have no information. This confirms that three-quarters of the 120,000 workers employed by companies located in these KCNs mostly originate from elsewhere.

- On the other hand, the CCNs that house small and medium-sized Vietnamese enterprises have an impact on local job creation. In fact, in the district of Chương Mỹ, where many CCNs have been established, the proportion of people working in industry is above average.
- Finally, the map of craft villages is highly consistent with that of the population economically active in industry, particularly the sphere of influence of small sources of workforce made up by the parent villages of clusters. The cases of highest rates of population economically active in industry are in fact very dynamic craft villages.

# Multi-activity weakened by metropolisation in craft villages

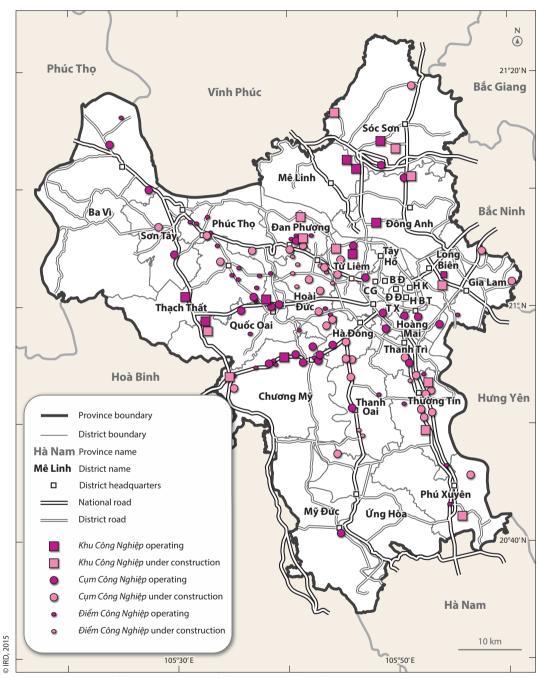
Simultaneously with modern sector industry collected into the industrial parks and zones built recently, thanks to foreign capital, a craft-industrial activity has developed in craft villages. Industrialisation of countryside in the Red River Delta is not new and craft villages have multiplied over several centuries, as wet rice farming, very labour intensive over limited periods of transplanting and harvest, could not feed a very dense and underemployed population during the close season. It is in villages where growing an extra crop of rice was not possible because of bad rainwater drainage that craft activities have developed the most.

### • Villages organised in production clusters

In the province of Hà Nội, in 2010, there were 1,270 villages where inhabitants practised some craft activity  $^3$ , among which 272 have received the status of craft village and benefit from incentive policies (more than 50% of EAP practise the activity and it supplies 50% of village income) and 244 are considered as having a traditional craft. If one refers to the 2003 MARD/JICA survey that has a less restrictive definition of craft villages, there are about 500 of them. According to the Population census, in 2009, there were 425,106 craft workers in the rural districts of the province of Hà Nội, representing 20% of EAP.

Specialised in the production of goods for daily use (food processing, votive offerings, industrial products and construction materials, commercial services and transport, etc.) and for export (wickerwork, furniture, woollen clothing, *objets d'art*, etc.), these villages are scattered all over the province, mainly in the west in the former province of Hà Tây, which was called the 'province of a thousand crafts'.

### Industrial parks, zones and sites in Hà Nội districts in 2008-2009



Source 1: Report n° 72/BC, Local Industries Department, Ministry of Industry 16/12/2008 on industrial zones
Source 2: Word Bank, 29/10/2010, Industrial wastewater management in river basins Nhue-day and Dongnai project. Inventories of industrial estates
Source 3: Ministry of Construction: Hanoi Master Plan, maps on operating and under construction industrial zones
Source 4: Housing and industrial projects, Holài Dức district 2008
Source 4: Housing and industrial projects, Holài Dức district 2008
Source 5: List of projects that have been accepted by the People's Committee under the resolution 9643/UBND-KH&DT of 06/10/2009

In the north near the airport and in the district of Me Linh, craft activities were scarce around 2006. Already during the colonial era, Pierre Gourou could only count about 10 villages mostly specialised in food processing (alcohol).

The situation of villages along navigable waterways enabled the import of raw materials from the highlands and hinterland in the North, such as rattan, bamboo and canna starch for making glass noodles. This is why one finds many villages of basket weavers and producers of foodstuffs along the Dáy River in Hà Tây (Plate 32). The creation and development of craft villages, on a plain criss-crossed with a multitude of waterways, galvanised the growth of village markets and strengthened a culture of trade and networking.

These villages did not develop around a road network, unlike the industrial zones. A very high number of villages have practised crafts for several centuries, and traditionally depended essentially on river routes for trade. They follow local development rationales of labour force polarisation and exchange of knowhow and are solidly integrated into a socialised territory. They are organised into clusters, or bunches of about 10 localities on average. The parent villages are usually well situated beside transport routes, while less active villages in the cluster are set back in the countryside.

The map of craft villages by activity shows how they group together by type of activity (Plate 32): about 10 villages on average for activities linking manual work and mechanisation of some stages of production (cabinetmaking, food processing, textiles, etc.), while for wickerwork, the bunches are much bigger and the links between villages seem to be more the result of commercial networks than of a strict division of labour.

Some of these clusters attract a large migrant working population and subcontract to an array of neighbouring satellite villages, occupying up to 10,000 workers, in the example of La Phu (knitting and confectionary). Employers are usually from the village, the workers from outside (the provinces in the south of the Delta or their hilly fringes), while the subcontracted live in the village and within a radius of about 20 km maximum.

A cluster of craft villages is a localised productive system that gathers businesses that are very varied in terms of size, status, means of production, techniques and endogenous development. The geographical concentration of small companies can be linked to the development of trade networks: it promotes economies of scale, a better use of supply networks and the spread of know-how

within a strongly village-based society. Accordingly, proximity between businesses within the cluster contributes to establishing rapid connections between a host of households and businesses within a network of skills and practitioners of complementary know-how.

Links between the villages of a cluster vary according to the kind of activity, the nature of the division of labour, the necessary know-how, manual or mechanical techniques, labour force requirements, markets supplying raw materials and commercial outlets.

In the case of wickerwork, an overwhelmingly manual activity requiring large numbers of poorly qualified labourers and yielding low income, the division of labour is relatively small. Not many stages of production are required to make a conical hat or nón, a basket or a stick of incense. Specialised workshops in some villages prepare the raw material (rough cutting of various kinds of bamboo, shaping, fungicidal treatment, etc.), which they then sell on to artisan producers. Wickerwork is an activity practised in parallel with farming.

## • A cluster of wickerwork weavers organised around a market

The weavers of the southern area of the province, specialised in conical hats (Chuông), wicker items (Phú Túc), making baskets, fans, birdcages and sticks of incense are gathered in 50 or so villages and there were more than 26,000 people working in them in 2003 (Mard/Jica) (Plate 33). Trade in the raw materials and sale of the finished products create a link between these thousands of mostly family producers organised into production groups or working individually as subcontractors for small bosses or intermediaries managing orders for export.

Raw materials are purchased in many different ways, but in this area, Chûong market creates a dynamic not found elsewhere. The ease of access to raw materials that the market provides has enabled this not very profitable and mainly female activity to persist. Know-how is passed on between villages by intermarriage, spreading out from the parent village. About 30 villages specialised in making nón are organised around this market. It is held not far from the dyke along the Đáy River, once the water highway for the province of Hà Tây. It takes place 18 times a month and supplies the various materials needed for making a conical hat (latan palm leaves, bamboo, plant fibres) from the hilly regions overlooking the Delta. Items such as forms providing the model for hats are produced in the

#### <u>(A)</u> Phúc Thọ 21°20′ N **Bắc Giang** Vĩnh Phúc Sóc Sơn Mê Linh Hà Nôi Đan Bắc Ninh Đông Anh ∖Sơn Tây Hà Tây Long BĐ HK Biên Gia Lam Thạch Thất ĐĐ HBT Hoà Binh Red River Chương Mỹ Province boundary Thường Tín Hưng Yên District boundary Hà Nam Province name Me Linh District name Urban sprawl of Hà Nội The various crafts Bamboo, rattan, rush Wooden furniture Mỹ Đức 👂 Embroidery Textile Food processing and processed foods 0 Metalwork Wickerwork and palm leaves Mother-of-pearl inlaying and lacquers Hà Nam Multi-activity Paper © IRD, 2015 Other 10 km 105°30′E 105°50′E

### Craft villages in the provinces of Hà Nội and Hà Tây in 2003

Sources: Jica Mard 2000, Surveys Casrad / IRD 2006. Design FANCHETTE S./PASCHIER M.

surrounding villages. *Nón* are also sold at the market, where collectors from the village or intermediaries topping up orders come to seek supplies.

The commune of Quảng Phú Cầu has specialised in cutting up several kinds of bamboo and subcontracts to villages of Phú Túc. It supplies artisans of the area with sticks of variable sizes, particularly those for making sticks of incense. As for the confection of wicker articles, it has developed from the parent village Lưu Thượng, which has spread the craft and attracted collaboration from about ten villages where workshops are subcontracted to the parent village.

With metropolisation and the installation of large-scale urban projects on farmland, craft villages are enduring very strong competition for land. Firstly, the close links between the villages of the cluster are integrated into a landscape organised around wet rice farming made up of paths, canals, and dykes, which has been reshaped for craft production (kilns, drying spaces, artesian wells, workshops, warehouses) and, particularly since the 2000s, for mechanisation of production and its spatial expansion in the *Diém Công Nghiệp* or craft industry sites.

The large-scale urban projects under construction on the farmland of these villages do not take into account the spatial and social organisation of these villages. The links between craft villages within clusters are intense and occur within a transport network made up of roads of varying sizes, local tracks or dyketop roads not suitable for vehicles, but along which struggles all kinds of traffic. The highways, residential and industrial zones cut across village farmland, isolating villages, blocking transport routes between villages.

In addition, in craft villages, the production system relies on a delicate alliance between craft industry, small businesses, market gardening, animal husbandry and subsistence agriculture. Small-scale businesses factor in these extra sources of income to pay lower salaries than in the city.

Two kinds of craft villages can be observed:

villages that live mainly from craft industry. Mechanisation and development of craft production have diverted these villagers from agriculture. But, in order to retain tenancy of their land, they lease it or lend it to farmers from neighbouring villages. In addition, the whole production system relies on a multi-active labour force seasonally subcontracted to work from home that needs to ensure its self-sufficiency in rice. All along the production line – in the initial and the later stages – a host of family households are involved seasonally, according to orders and market fluctuations;

- villages where craft industry constitutes a supplement to agriculture.

Farmland, mainly planted with rice, provides the family with self-sufficiency in grains. Very little rice is traded, as surpluses are rare. It ensures food security in the event of a slump in sales of produce or temporary unemployment of small-scale subcontracted craft workers. Although it only brings in a supplement to village income, farmland contributes, with craft industry, to keeping large populations in their villages and renders it possible to limit their emigration to towns and cities. If agriculture disappears, the income from secondary craft activities, such as wickerwork, embroidery or processing of agricultural produce, will not suffice to meet villagers' needs.

### Hà Nội's endangered green belt\*

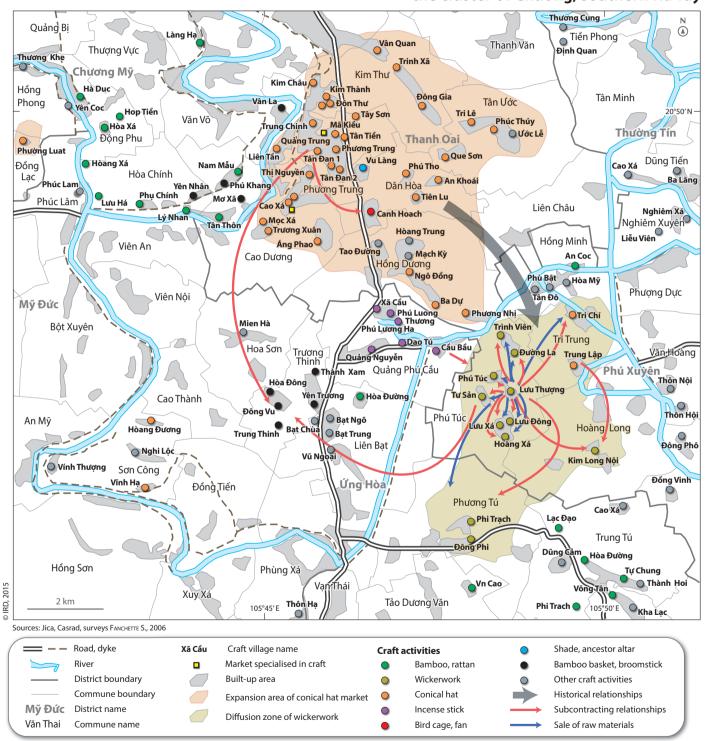
#### • An ancient role in supplying the city

Very early in Hà Nội's history, craft villages and specialised agricultural villages located on the fringes of the capital, and today integrated into the urban fabric, developed to meet the consumer needs of the city, of the court, and then of colonists (CHABERT, 2004). Villages specialised in market gardening were located to the south and the southwest, those growing rice in the west, while others practising silkworm farming were situated near alluvial areas for growing mulberry trees to feed to silkworms (around West Lake and near the Đáy River, in the vicinity of Hà Dông). Villages specialised in production of ornamental plants were bunched to the west of the capital in the district of Từ Liêm. The green belt was strengthened by centralised planning in the 1950s-1980s. Dry farming, and particularly market gardening, was concentrated in the rural districts of Từ Liêm, Thanh Trì, Gia Lâm and Đông Anh that adjoin the urban neighbourhoods of the capital (Plate 34).

Peri-urban agriculture has an important function in feeding the city's population. In 2001, the province of Hà Nội's production covered 44% of the food consumption needs of the capital's inhabitants, 56% of grain, 53% of vegetables, 48% of pork, 45% of poultry (MAI THỊ PHƯƠNG ANH *et al.*, 2004). The majority of vegetables consumed in the city were produced within a radius of 30 km, China meeting the deficit in tomatoes and cabbages during the rainy season. The green belt offers more than 70% of vegetables to urban consumers (for leaf vegetables in all seasons and other vegetables during the main production period, from

<sup>\*</sup> P. Moustier and Đào Thế Anh

#### Connections between craft villages specialised in wickerwork: the cluster of Chuông, southern Hà Tây



November to March). 95 to 100% of lettuce comes from areas less than 20 km away, while 73 to 100% of water morning glory (*Ipomoea aquatica*) is grown less than 10 km away (HOANG BANG AN *et al.*, 2006; MOUSTIER *et al.*, 2004).

The origin of temperate vegetables is more variable according to seasons: while 75% of tomatoes are grown less than 30 km from Hà Nội in winter, 80% of tomatoes sold in the summer months come from China and 15% from Dalat, more than 1,000 km south of Hà Nội, but these percentages vary from year to year: in 2011, China's share in supply had decreased to 30%, while it rose for Dalat (43%) and for the province of Nam Định. Commodity chains are very short. For example, 85% of water morning glory is marketed directly by the producers at wholesale markets to retailers-wholesalers or retailers.

The proximity of urban areas facilitates relations of trust and exchange of information between producers, vendors and consumers, in particular to control the sanitary quality of products. Accordingly, all the supermarkets and vegetable shops in Hà Nội with a quality label guaranteeing them as healthy are supplied by co-operatives located in the province of the same name with which they maintain regular contacts; the producers deliver to supermarkets every morning (Figure 16). In addition to this supply, they receive vegetables from collectors and wholesalers in Dalat, Mộc Châu, Hưng Yên, mainly during the off-season for local produce or for specific vegetables from temperate climes.

Peri-urban agriculture is intended for familial self-consumption and sale. It is part of the multi-activity of village families that practise both trade and craft industry. In a commune such as Trung Trắc, agriculture represents more than half of income (Lecostey & Malvezin, 2001). It was estimated that in 2000, agriculture occupied 30% of the population of the province of Hà Nội and 27% in 2008  $^4$ .

Recent surveys conducted with residents of Hà Nội show that the majority of them have regular contacts with farmers from their families or their neighbourhoods. More than 80% of non-farmers favour maintaining agriculture in the city, mainly for reasons of food supply and employment. But they have doubts about the maintenance of agriculture over the next 10 years, and feel their opinions are ignored in urban planning decisions (Tô THỊ THU HÀ et al., 2014).

### • Ambiguity of policies: between discourse and reality

If the discourse adhered to by officials from the city of Hà Nội's department of agriculture and rural development is to be believed, it is important to uphold a

balance between urbanisation, industrialisation and agriculture. The department's plan seeks to maintain an agriculture deemed ecological (sparing use of chemical products, use of clean water), with high added value, which in 2020 should occupy 40 to 50% of the area of natural ground in the city. Hà Nội's master plan anticipates that this agriculture will be concentrated to the west of the city, next to the Đáy River.

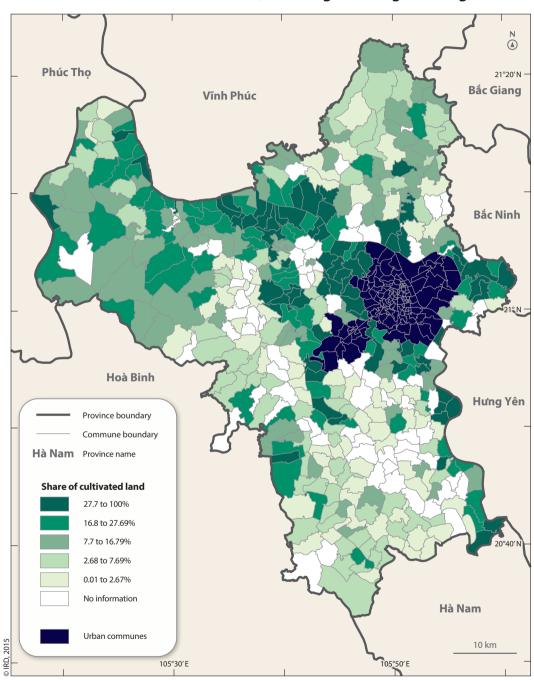
This (re)location poses the problem of skills of the farmers concerned, market gardening currently being little practised in this area (except in Hoài Đức), while the municipality has in the past invested in training and infrastructure in other districts (Đông Anh, Gia Lâm, Thanh Trì, Sóc Sơn). In addition, the protection of agricultural areas is not very credible, given the number of urban projects already installed.

Communal and district authorities (and authorities more generally) seem to have limited leeway opposite the financial power of private operators. However, variations are observed depending on the desire of communes to promote agriculture, which seems quite closely linked to employment opportunities and to expected compensations. Accordingly, in the commune of Hà Đinh, urban district of Thanh Xuân, as in the commune of Vân Nội in the district of Đông Anh, there is plainly a desire to sacrifice agriculture upon the altar of urban development, despite its erstwhile importance. This is not the case in the communes of Song Phương and Tiên Yên, in the district of Hoài Đức, where the production of safe vegetables is encouraged.

A comparison of several maps (share of rice in crop systems, share of annual crops, location of craft villages in 2010) makes it possible to highlight several large categories of peri-urban agriculture in Hà Nội (SAUTIER *et al.*, 2014; QUERTAMP, 2010):

- former 'green belt' of Hà Nội (Từ Liêm, Gia Lâm, etc.) with strong competition between farmland and land for housing;
- a kind characterised by a strong density of craft villages, which coexist with a 'debased agriculture' and increasingly extensive rice farming in particular in the former province of Hà Tây to the west;
- diversified agricultural villages new 'green belt' (vegetables, fruit orchards and agro-tourism) – especially in the green corridor between the Đáy and Tích Rivers and close to the Red River in the south (Hoài Đức, Đan Phượng, etc.);
- a group of villages that is developing intensive rice farming, especially in the low-lying zone/area to the south (districts of Thanh Oai, Mỹ Đức, Ứng Hòa, Phú Xuyên);

### Share of farmland used to grow dry crops (including market gardening) in 2009



Source: data from the Hà Noi District People's Committee, 2009, provided by Lê Văn Hùng from Casrad (Center for Agrarian Systems Research and Development). Design Fanchette S.

- areas in the process of strong agricultural diversification with high added value (vegetables, flowers) or moving towards non-agricultural jobs (to the northeast: Sóc Sơn, Me Linh and Đông Anh);
- finally, in the mountainous region of Ba Vi to the west, an area geared towards animal husbandry, tourism and cash crops, such as tea.

Until the 2000s, farmland had been relatively spared from urbanisation. Accordingly, cultivated land in the province of Hà Nội went from 43,789 hectares in 1990 to 38,200 in 2006. However, this figure has apparently gone down to 34,177 hectares in 2010 (for the districts corresponding to the former province of Hà Nội) <sup>5</sup>. Following the expansion of the capital province over its western neighbour of Hà Tây, in August 2008, its total area has more than

tripled and its area of agricultural land has risen from 38,200 to 192,720 hectares, and represents 57% of the total area (Table 4).

Table 4 – AGRICULTURAL TRENDS IN THE REGION OF HÀ NỘI BEFORE AND AFTER THE ENLARGEMENT

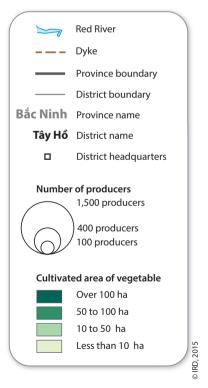
	1990	1999	2000	2006	2008	2010
Total area (ha)		91,846	92,098	92,200	334,470	334,470
Agricultural area (ha)	43,789	43,320	44,705	38,200	192,720	188,601
Agricultural area (%)		47.2	48.5	41.4	57.6	56.4

Sources : To et al. (2011) for the table; for the data: Rossi & Cu (2002) for 1980; General Statistical Yearbook of Vietnam and Hà Nội Statistical Yearbook for 1990-2006 and 2008; Hà Nội Statistical Yearbook, 2008.

Soc Son Mê Linh 21° 10′ N **Dong Anh Bắc Ninh** Tây Hồ Long Biên □( cc □) □ BĐ **Gia Lam** Từ Liêm TX**Hoàng Mai** Yên Hà Đông Thanh 5 km 106° E

Figure 16 – LOCATION OF AGRICULTURAL CO-OPERATIVES FOR SAFE VEGETABLES IN THE URBAN DISTRICTS OF HÀ NỘI





Sources: Data collected by Nguyễn Thi Tấn Lộc, FAVRI, 2008

Table 5 – EVOLUTION OF AREAS CULTIVATED IN THE NEW HÀ NỘI

Area cultivated (ha)	Year 2000	Year 2009	Annual variation (%) 2000-2009
Rice	236,689	206,890	- 1.5
Winter-spring rice	115,648	103,211	- 1.3
Autumn rice	121,221	103,679	- 1.7
Maize	34,927	18,411	- 6.9
Soya	15,148	7,278	- 7.8
Peanuts	7,984	6,947	- 1.5
Cassava/manioc	3,714	2,515	- 4.2
Vegetables	29,333	26,936	- 0.9
Fruit trees	9,139	13,530	+ 4.5
Flowers & ornamental plants	3,552	4,288	+ 4.5

Source: Hà Nội Department of Statistics.

The location of some agricultural areas outside dykes, prone to flooding and thus difficult to build on, protects agriculture to a certain degree from expropriation for urban land. However, farmland can be recovered for uses other than construction. Accordingly, on an agricultural area of 389 hectares in the commune of Vân Nội (district of Đông Anh in the north of the province), 150 hectares should be allotted in the years to come to an eco-tourism project (statement in 2009 by an official from the communal office of agriculture and rural development). We observe the disappearance of production of water morning glory in intra-urban districts; in the peri-urban districts, the regression of rice farming and the maintenance of market gardening, fish farming and production of flowers, with increasing support for 'ecological' production.

In the district of Hoài Đuc, to the west of the city, agricultural areas have decreased by half between 2000 and 2008, from 8,355 hectares to 4,373 hectares, and in 2020 only 735 hectares will be preserved for market gardening, gathered on land located outside the dyke along the Đáy River (Table 5). Farmland protected by the dyke will be entirely expropriated for urban projects in the districts near the city. This process of expropriation has already been taking place in some districts since the 2000s: in that of Thanh Trì, to the south of the city, farmland reduced from 5,190 hectares to 3,548 hectares in 2008, and 2,830 hectares are projected for 2020.6.

At the beginning of the 2000s these districts supplied respectively 6 to 30% of cabbage depending on the months and 80% of water morning glory for Hà Nội (MOUSTIER *et al.*, 2004). A survey conducted in June 2011 showed the

withdrawal of supply areas for water morning glory and cucumbers within the provinces of Hà Nội, similarly within the province of Hung Yên for the latter crop, namely a retreat of about 30 kilometres (SAUTIER *et al.*, 2014). It remains to be seen whether or not this extra distance has resulted in higher costs and prices.

#### Conclusion

Analysis of the latest results of the 2009 population census shows that the process of metropolisation is accelerating in favour of the new enlarged province of Hà Nội, which recorded annual demographic growth of 2.2% between 1999 and 2009, compared with 1.2% for the country as a whole, with an inward migratory surplus of 292,426 people (between 2004 and 2009). This growth mostly affects peri-urban areas where demographic densities are highest (more than 1,500 inhabitants/km², sometimes 2,000 inhabitants/km²), particularly those of the first urban ring recently integrated into the city perimeter where several urban villages have become veritable dormitory towns for migrants. Centres of industrial labour force sometimes attract migrants from remote provinces.

In addition, between 2002 and 2008, the Vietnamese agricultural sector recorded the biggest fall in number of jobs in the Red River Delta, in favour of the industrial and service sectors. The informal sector is the one creating the most jobs. It is closely followed by businesses with foreign capital investment. The craft-industrial sector plays a growing role in providing employment in the rural economy. Two kinds of businesses contribute to this: relocated factories in rural peri-urban areas and many clusters of craft villages, established centuries ago and major employers of part-time or full-time labour force. However, these villages have the capacity to offer jobs locally to the rural population of the peri-urban fringe, unlike businesses situated in industrial zones that mainly recruit a labour force with little training from the surrounding provinces, workers who are poorly paid and capable of putting up with the difficult working conditions of globalised industry seeking quick returns on investment. Even if the growth in informal jobs is high in industry and construction, the Vietnamese state's industrial policies mainly support the sector financed by foreign investment and are withdrawing from local industry that had once benefitted from its support.

Intensive and diversified agriculture retains an important place in the authorities' official line, and agriculture known as ecological with a large added value is favoured by incentive policies. However, in reality, large-scale urban

projects and the power of market forces in the attribution of land weaken these activities and demonstrate to what extent the various ministries in charge of the capital's development promote contradictory policies.

The production systems at work in the villages of these densely populated peripheries are based on multiple uses of available space and multi-activity associated with wet rice farming, foundation of the Red River Delta's economy. These very populating production systems, in the sense that they are capable of feeding a large population, are the source of a process of very active *in situ* urbanisation, characterised by a densification and an elevation of housing and a diversification of activities in large rural villages.

However, the Hà Nội master plan to 2030 advocates the separation of urban functions (residential, industrial, commercial and leisure) and resists multiple uses of land. In addition, the government and the municipality of Hà Nội have implemented reforms to liberalise land transactions and accelerate the change in allocation of land so that investors undertake major works to overhaul the new globalised capital. But the liberalisation of land transactions has manifested itself in soaring prices, pressure on land and intensified competition that could jeopardise at once the realisation of large-scale urban projects, but also the *in situ* urbanisation process implemented by villagers.

The process of metropolisation initiated on the Chinese coastline 10 years before it came to Vietnam demonstrates that most rural regions (apart from some in the environs of Canton in the Pearl River Delta) do not profit from the country's lightning economic rise during the 1990s and are neglected in favour of cities that globalisation favours for its liberalisation of the country. These regions see their economic situations deteriorate. Expropriations linked to urban and industrial development in peri-urban areas, unequal access to social services and facilities among city dwellers and rural populations, and cumbersome bureaucratic procedures create a rather serious social unease.

<sup>1)</sup> Source: VGCL report at the Conference on Directive 22 of the Politburo, in Hô Chí Minh City, June 2008.

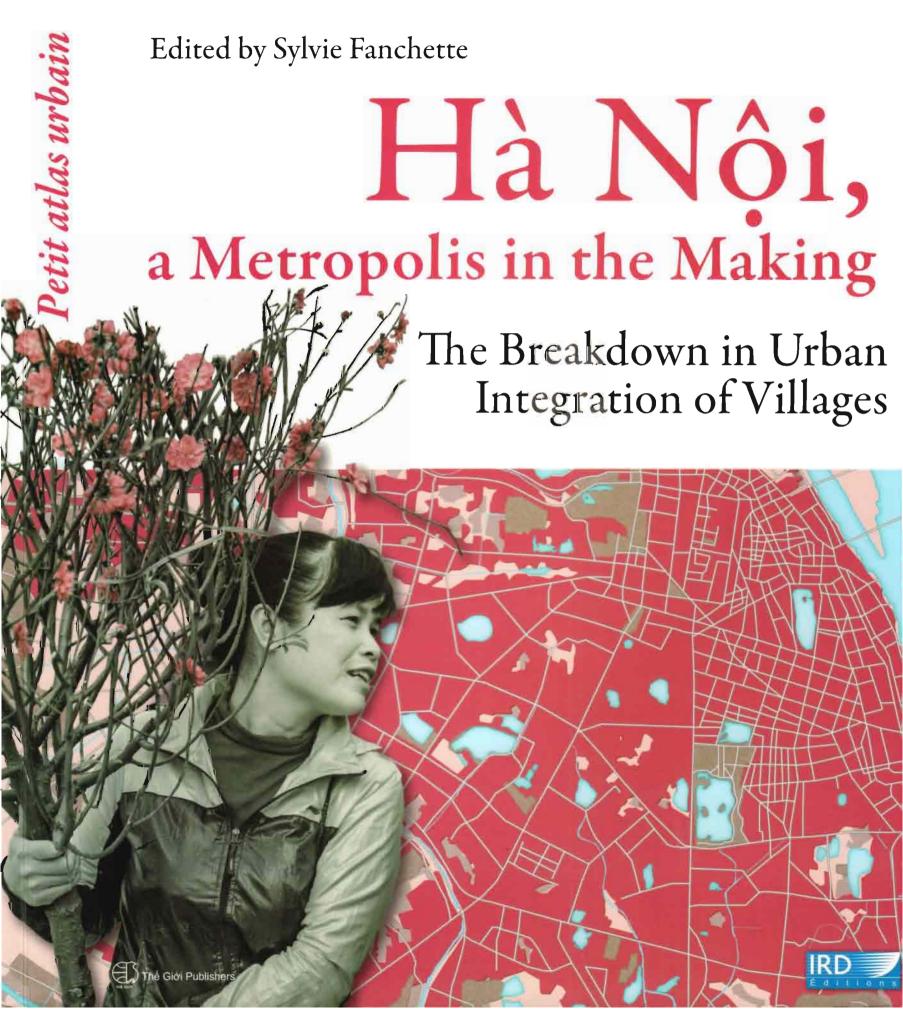
<sup>2)</sup> During the collectivist era, many state industrial enterprises had to employ villagers on site. In the peri-urban atlas of Ha  $N\phi$ i (VTGEO et UMR Regard 2002), the authors maintain that: 'The area of Sai Dong B enjoyed preferential treatment in the allocation of land. 70% of the 1,000 workers working in the various companies come from Trach Ban'.

<sup>3)</sup> Hà Nội Department of Trade and Industry, 2010.

<sup>4)</sup> Data collected by To Thị Thu Hà, Favri, from the authorities of Hanoi's Department of Agriculture and Rural Development.

<sup>5)</sup> See previous footnote

<sup>6)</sup> Data collected by Trấn Thị Thu Hà from the Office of Agriculture and Rural Development in the districts of Hoài Đức and Thanh Trì.



Edited by Sylvie Fanchette

# Hà Nội, a Metropolis in the Making

The Breakdown in Urban Integration of Villages

Foreword by Rodolphe De Koninck

Atlas edited by the Cartography Department

Direction de l'information et de la culture scientifiques pour le Sud (DIC, IRD), IRD France-Nord (Bondy)

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