

INDUSTRIAL PARKS



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III. INDUSTRIAL PARKS 'MADE IN VIETNAM'

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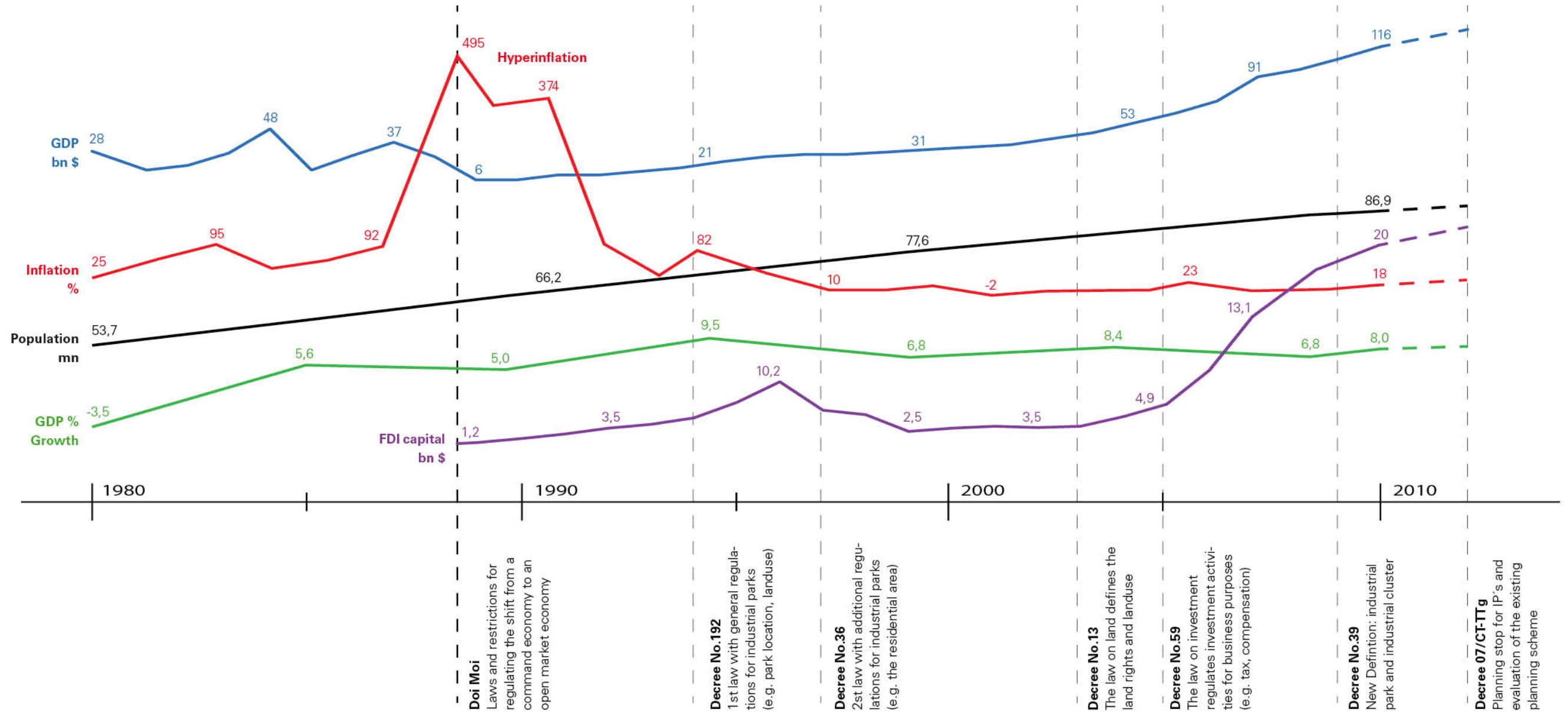
No Plans For The Future

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'DOI MOI' CHANGES EVERYTHING !

In the end of the 1980th a hyperinflation brought Vietnam's economy to its knees. In response to that the Vietnamese Communist Party established a series of new law restrictions called the Doi Moi. These reforms allowed and regulated the shift from a command economy to an open market economy. Because of this development the industrialization process in Vietnam accelerated rapidly in the last twenty years. With the raising numbers of foreign investors the Vietnamese economy reconvert quickly and got attractive as a manufacturing location due to the cheap labor force.





From Command Economy To Market Economy

In the late 1980th Vietnam was struggling with an economic crisis. A hyperinflation that rose up around to 500 % in just a couple of years badly affected the country. In reaction of this situation the Vietnamese government issued a series of reforms called the Dai Moi. These reforms opened Vietnams commercial market to foreigners and transferred the command economy to a market economy. The resulting foreign direct investments (FDI) increased right from the start and helped to deflect the hyperinflation and to stabilized Vietnams economy. The distribution of the FDI's was not quite same spreader over entire county. 59 % of the investments went to the southern economic zone of Vietnam which were influence much stronger in the recent history because of Vietnam's after war situation and the resulting split of the country. The government issued yearly a lot of different laws and decrees which supported the transformation process of their economic system especially in the industrial sector with it's special typology - industrial parks.

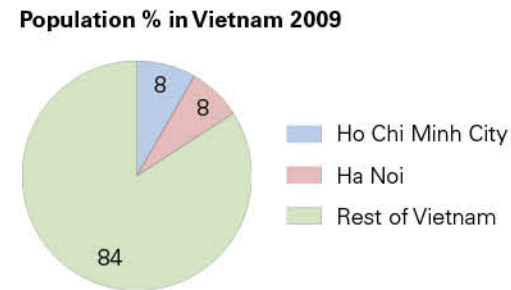
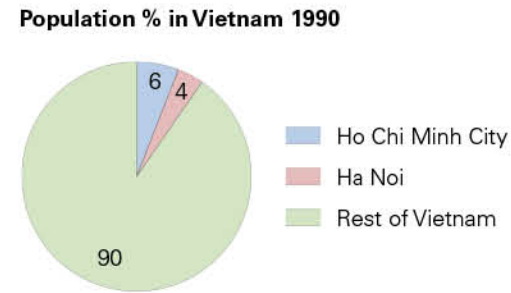
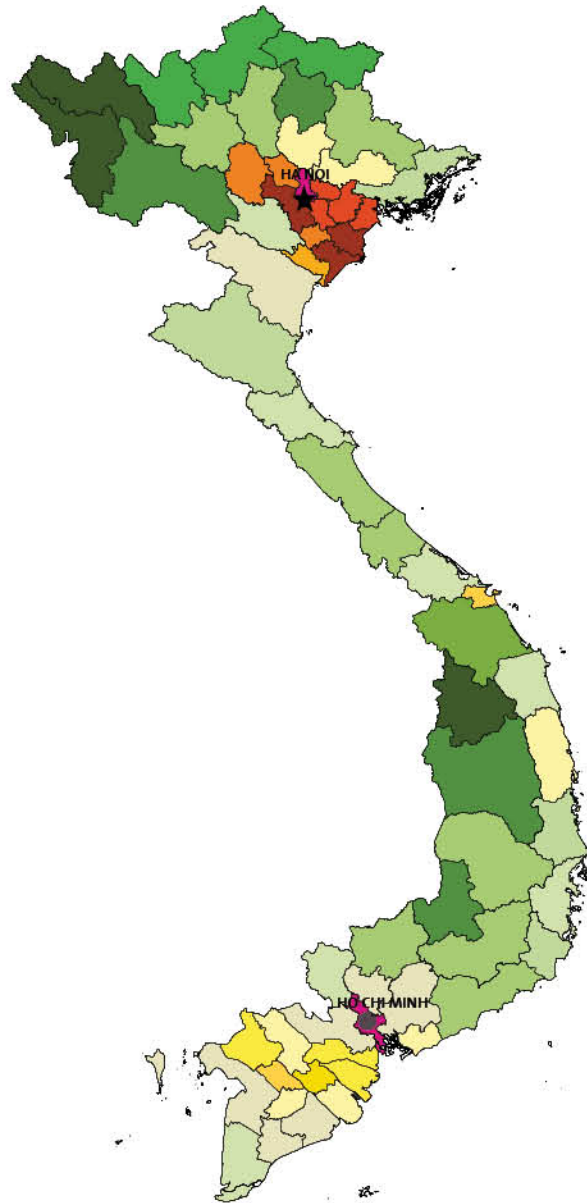
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Times Change

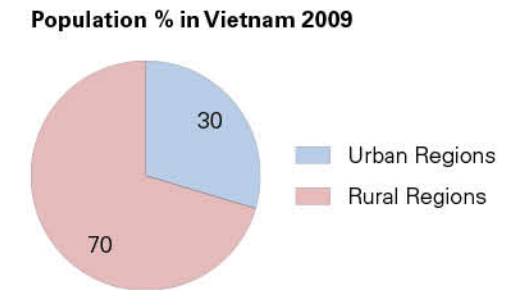
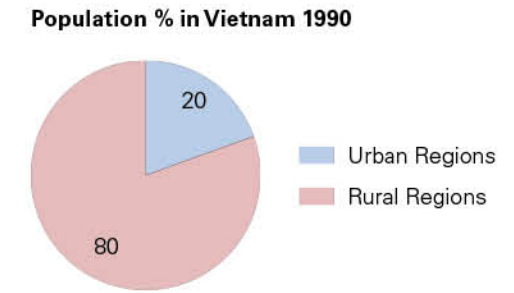
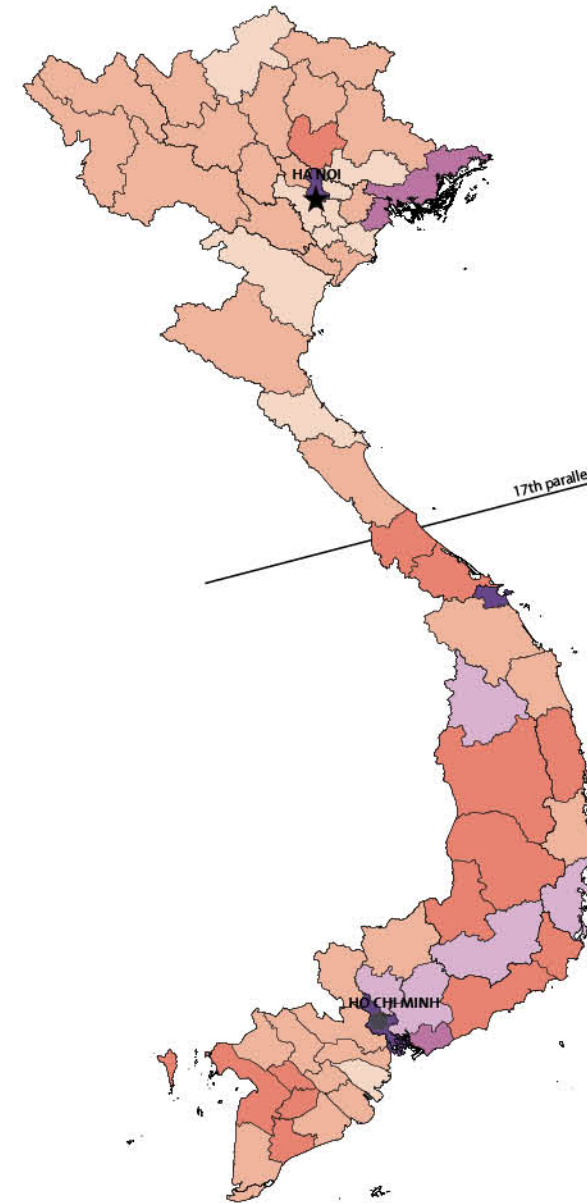
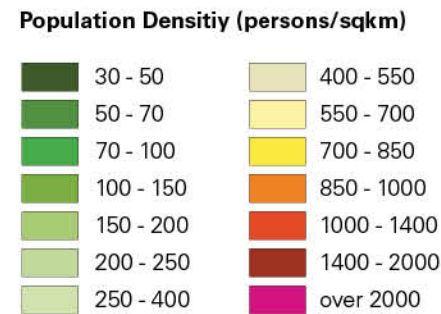
Since the Doi Moi law restraints were established the development in Vietnam is drastically going in one direction - from a former agricultural to an industrial country. This is plainest visual in the changes of the landscape in Vietnam. Where previously just were endless rice fields today there are wide roads and fenced industrial areas.

In the last 26 years the Industrialization in Vietnam has boosted its economy. As a consequence urbanization processes are visual all over the country. New industrial projects are sprouting out of the ground all over the country especially in Red River and the Mekong Delta. With them the surrounding infrastructure and settlements shape the landscape to their needs.



Increasing Urban Population

In the country there are existing two condensed areas: the Red River Delta in the north and the Mekong Delta in the south. In their centers located are the two largest and highest populated cities of Vietnam: Ha Noi in the north and Ho Chi Minh City (former Saigon) in the south. There is also a high populated area in the middle of the country around Da Nang. This city operates as a hub between the two delta regions. The growth of the two major cities in the last 19 years was tremendous. Ho Chi Minh City grew from 6 % to 8 % and Hanoi even doubled its inhabitants from 4 % to 8 % of the entire Vietnamese population.

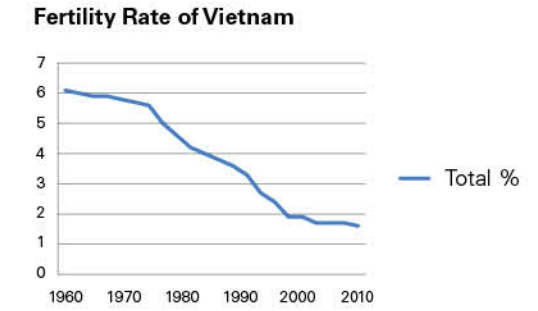
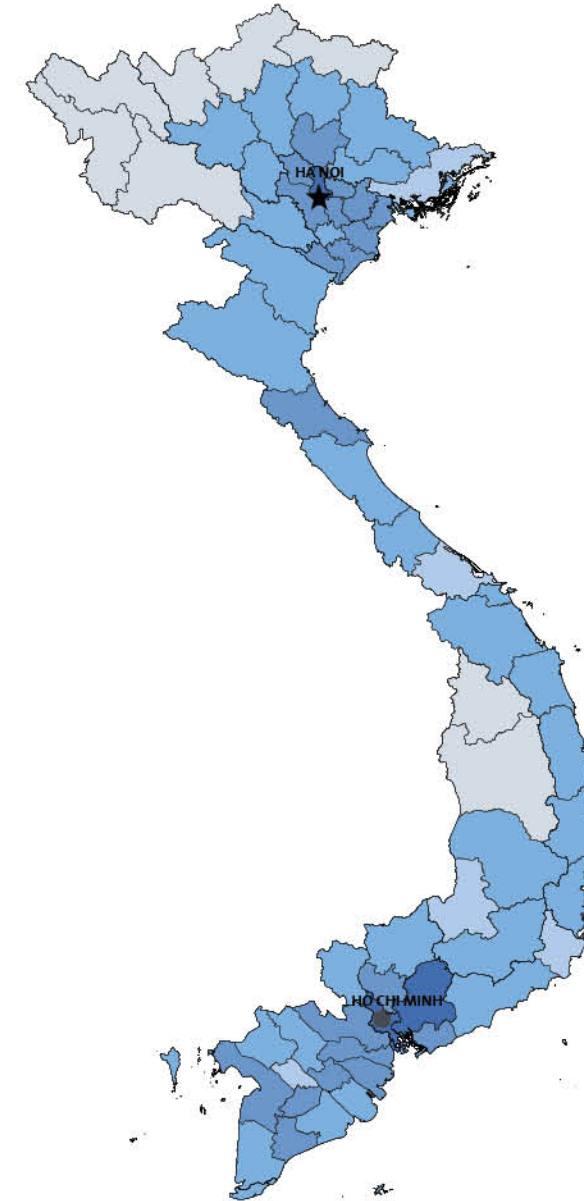
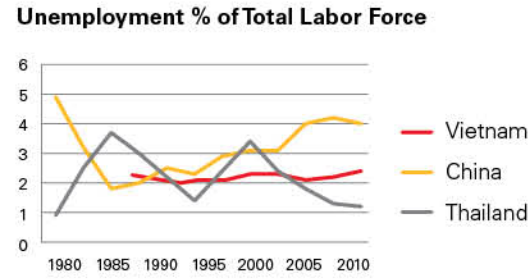
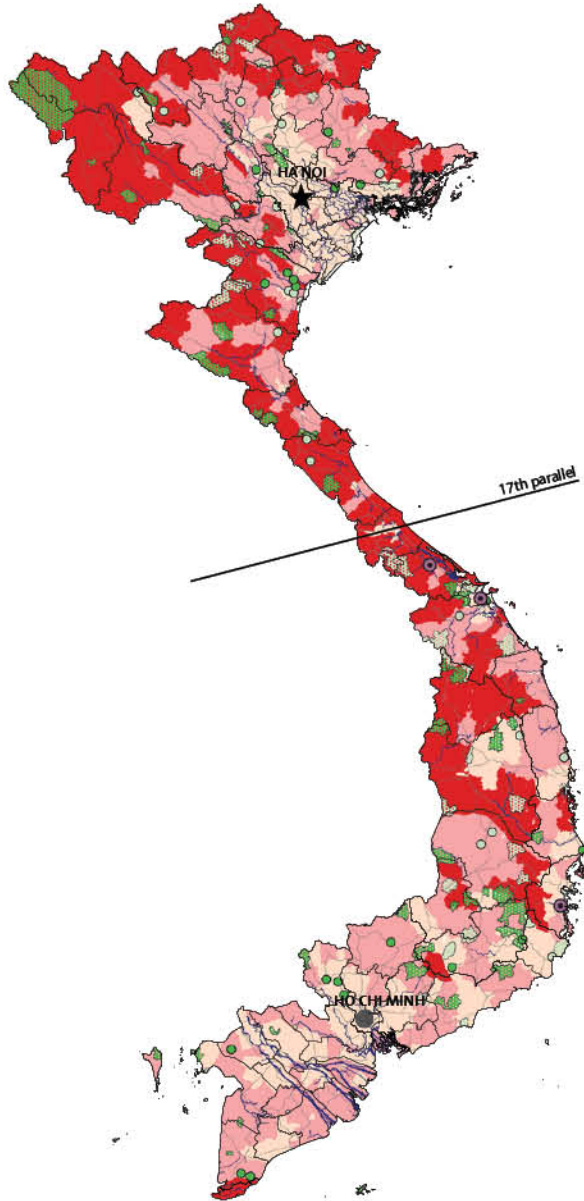


Rural Exodus

The level of urbanization depends on the number of the Population. There are as well the two areas around the major cities which are the most urbanized. In addition the coastal areas are higher urbanized than the rural areas . The percentage of urbanization in Vietnam has enhanced from 20 % to 30 % in the last 19 years. This fact shows a tremendous development and a progression from an agricultural to an industrial country. The obvious different grade of urbanization in northern and southern Vietnam is a result of the former division of the country after the Vietnam War and the economic aid by the USA for South Vietnam.

Level of Urbanization
(2010: Vietnam 30%, rate/a 3.0%)





Rural Poverty

The grade of poverty is likewise confirming the thesis that Vietnam's development is making a shift from an agricultural to an industrial country. The poorest regions are mostly located in the countryside compared to those wealthier regions next to the big cities and the coast line.

Nevertheless the rate of unemployment was pretty constant and not influenced by the destitution. This means that the labour market has increased the living conditions and decreased the poorness. The degree of poverty differs in the north and south also due to the fact of the former division of the country after the Vietnam War.

Incidence of Poverty P0

(P0 is the headcount index, P1 is the poverty gap index for poor nations only)



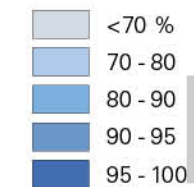
Urban Literacy

The literate population is living in the higher urbanized and wealthier areas. The education is normally provided in the cities as well as most of the labor.

In the rural areas there is usually no need for a higher education. That means that the regions in the countryside can not provide their inhabitants with a higher education. As a result the people who wants to reach out for a better education have to move to the urban regions.

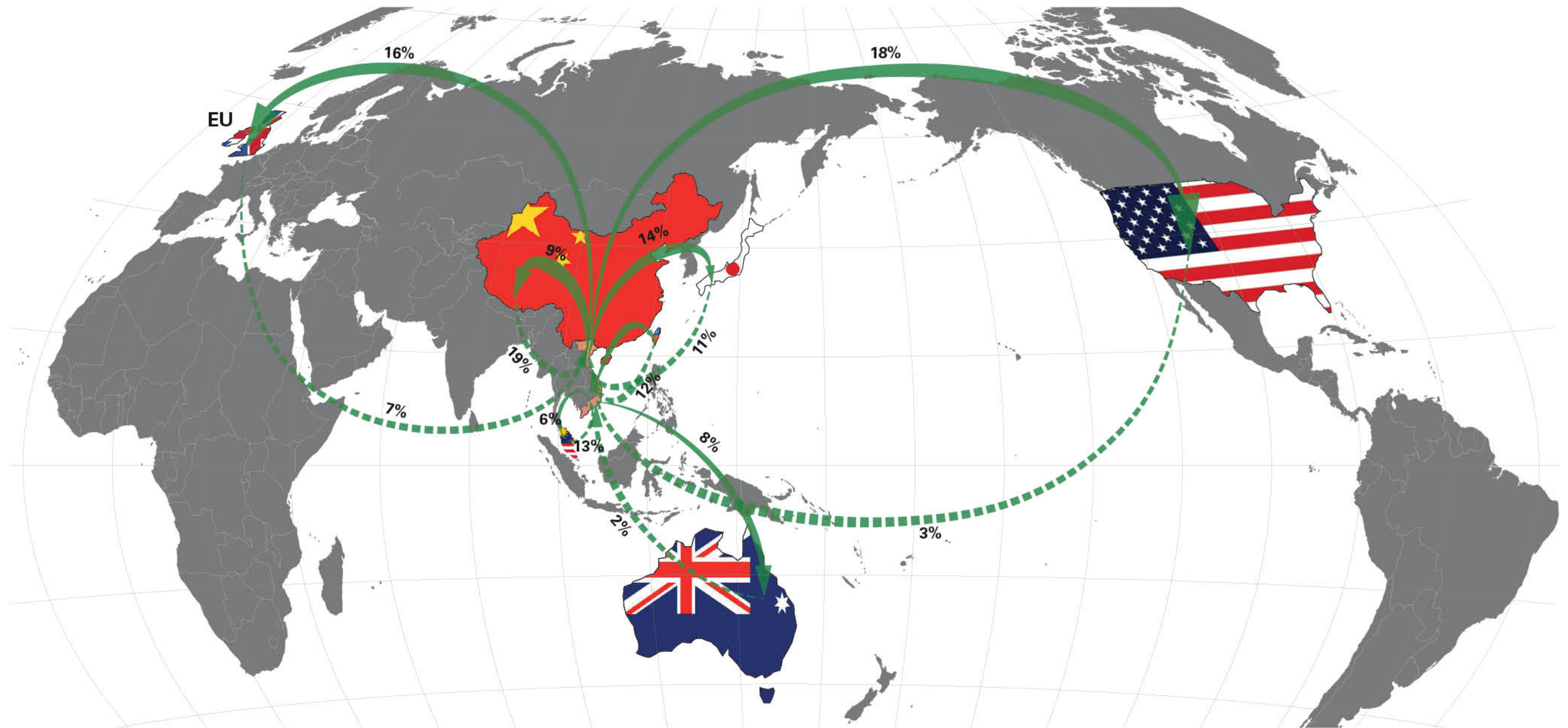
These phenomenon is also supported by the decreasing fertility rate which is an indicator for a higher educated society.

Literate Population (15 years and over)



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Import

Since the USA has lifted its trade embargos Vietnam opened its economy to a worldwide import and export market. Some of the most important trading partners are China, Japan, USA and Europe. The most determining goods in the import market are production goods, fuels, textiles and clothes.



Export

With the support of its trading partners Vietnam's market has skyrocketed in the last two decades. The exported goods with the biggest volume are raw oil, textiles, shoes and seafood. Vietnam is a rich resourced country but has to export their raw products because of the lack of know how in the refining processes.

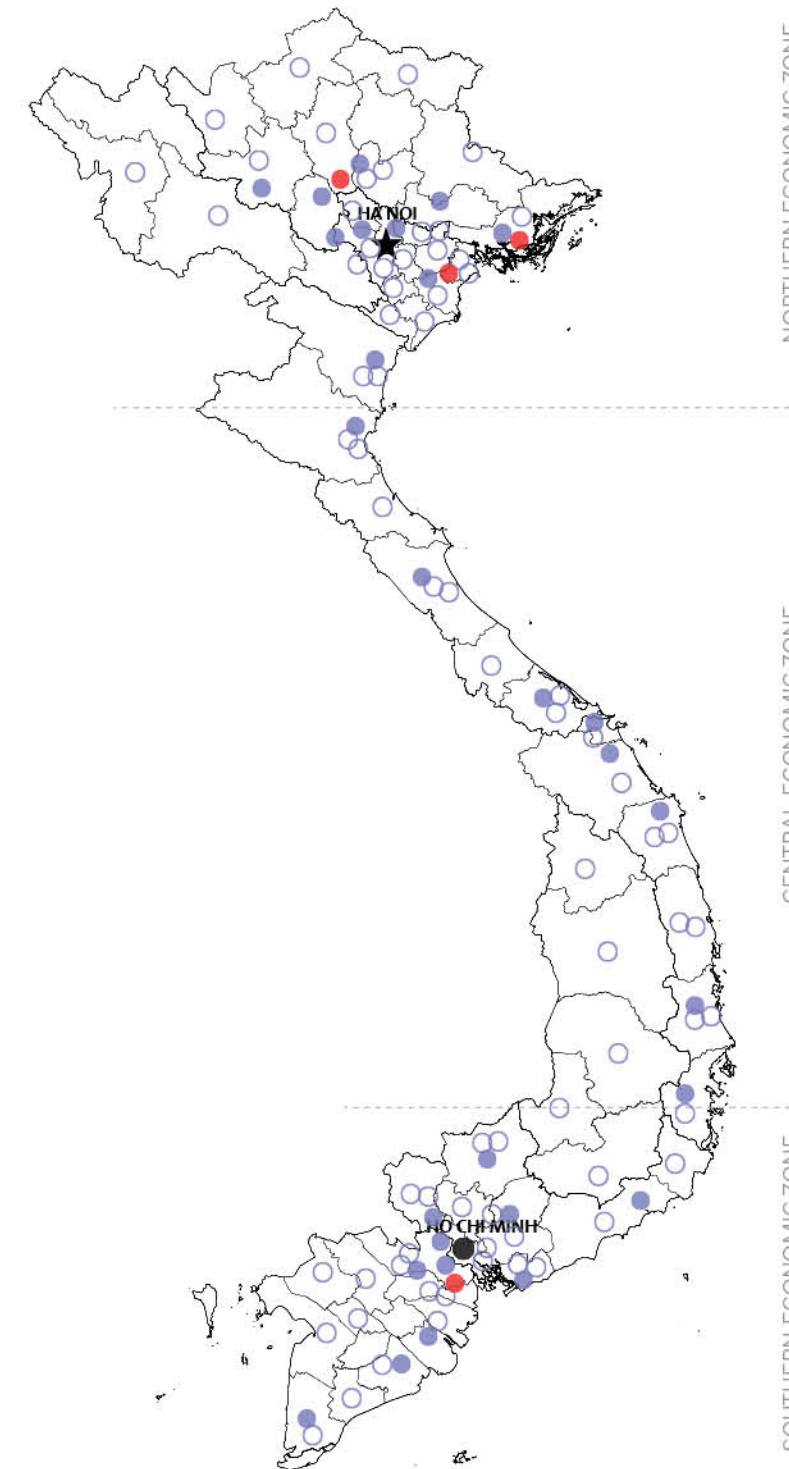
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WHAT ARE INDUSTRIAL PARKS ?

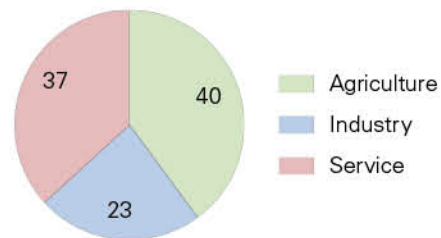
Vietnam has three different economic regions: The Red River Delta, the middle part of Vietnam and the Mekong Delta. The two delta sections are the most economic valuable in the country. Because of the American influences during the 1960th the Mekong Delta is still a bit ahead giving the economic strength. But the Red River Delta is catching up fast. Industrial parks in which most of the industrial production happens are appearing all over the country. In the last 20 years plenty of those parks were established.



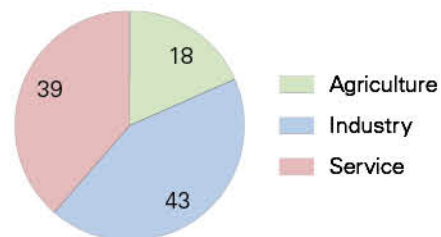
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Economic Sectors % of Vietnam 1990



Economic Sectors % of Vietnam 2009

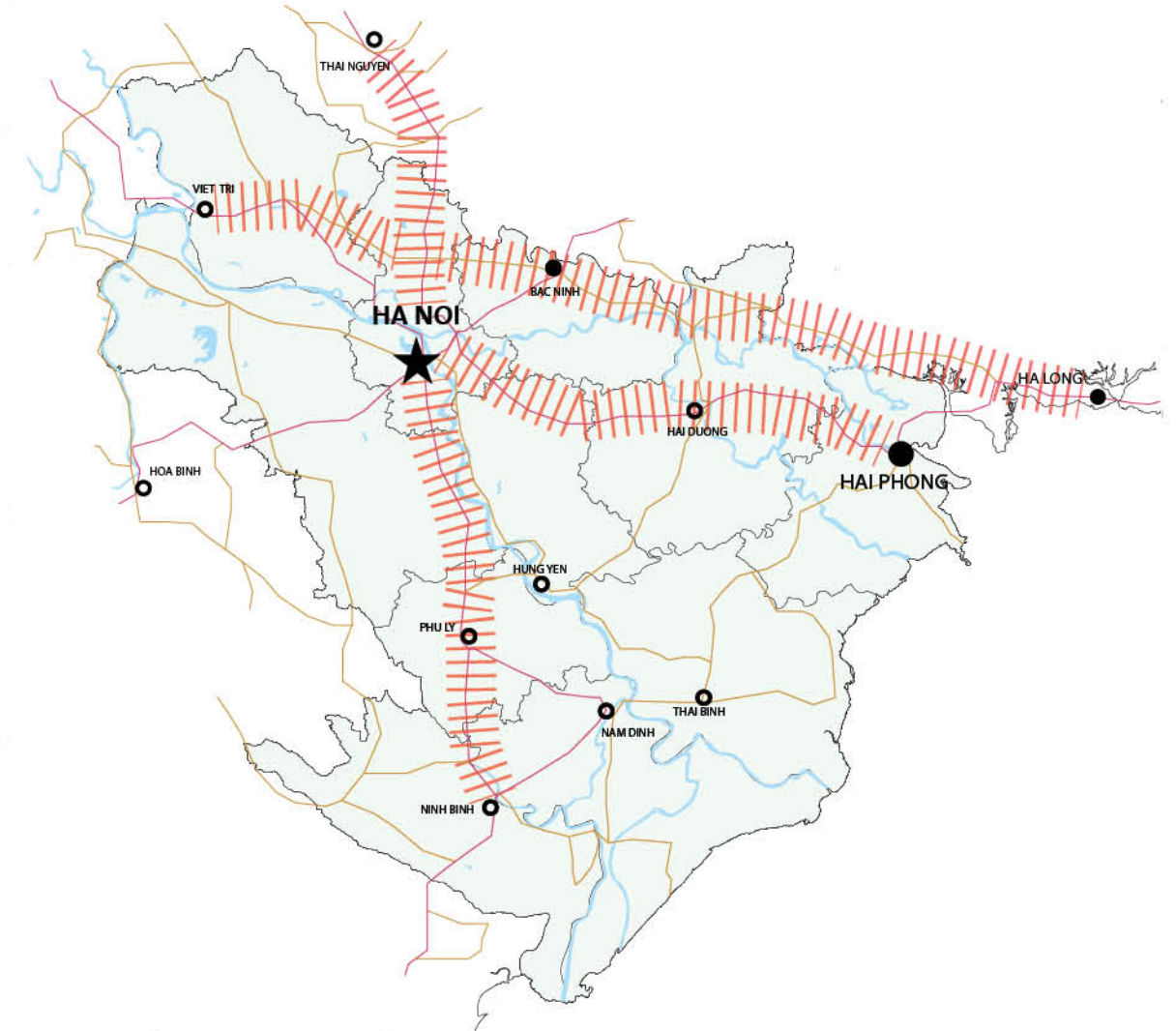
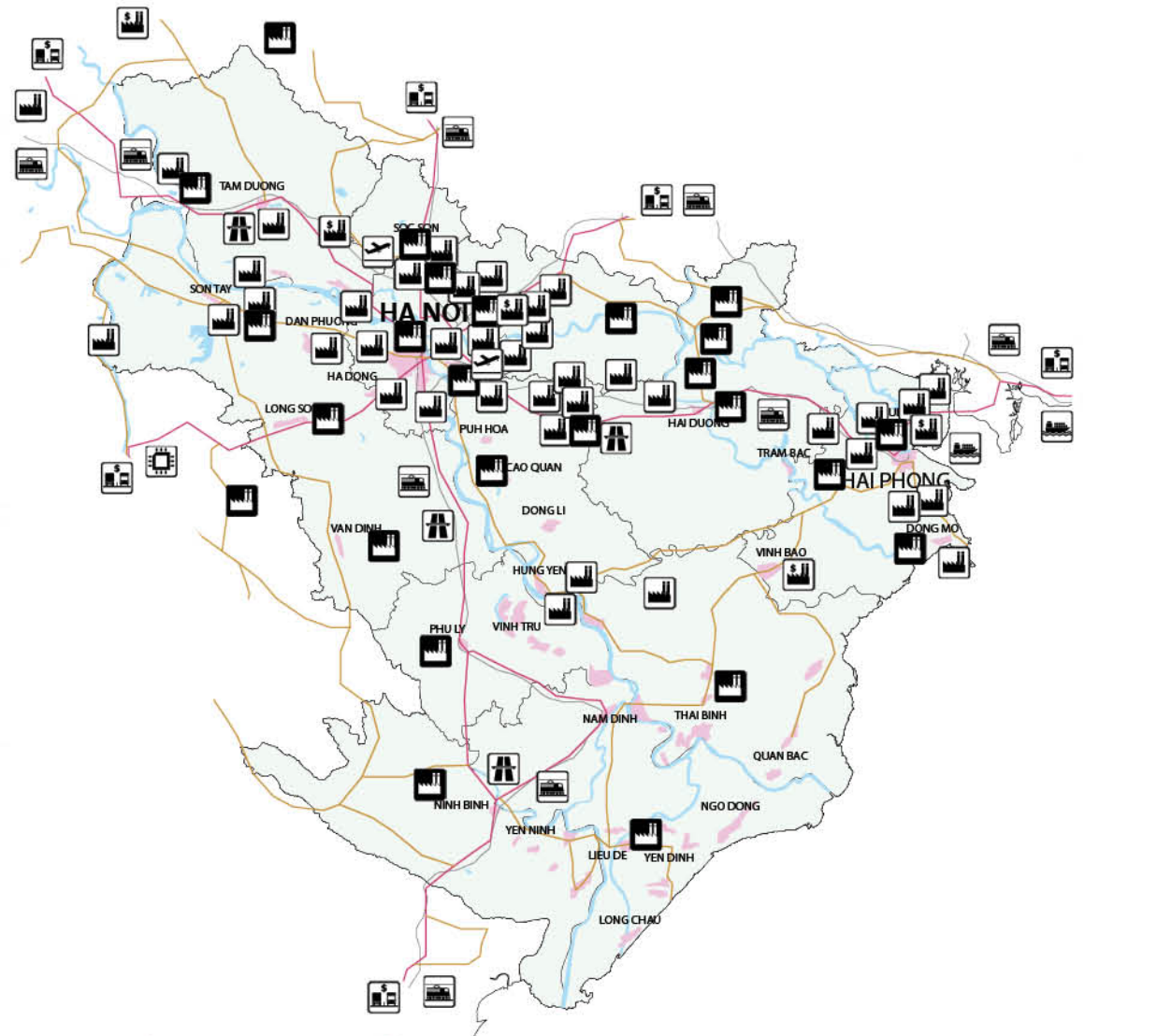


Industrialization of Vietnam

In 1990 40 % of the people were working in the agricultural sector while 2009 there are just 18 % left. However the other two sectors have gained percentages. The service sector slightly increased from 37 % to 39 % and the industrial sector almost doubled from 23 % to 43 %. According to this numbers the industrialization of Vietnam showed a huge growth over the last 20 years.

Three Economic Sectors

The shift in the three economic sectors is a convincing indicator for the state of development. In an agrarian country most of the people are working in the agricultural sector compared to an industrial country where few people are working in agriculture and most in the service and in the industrial sector.



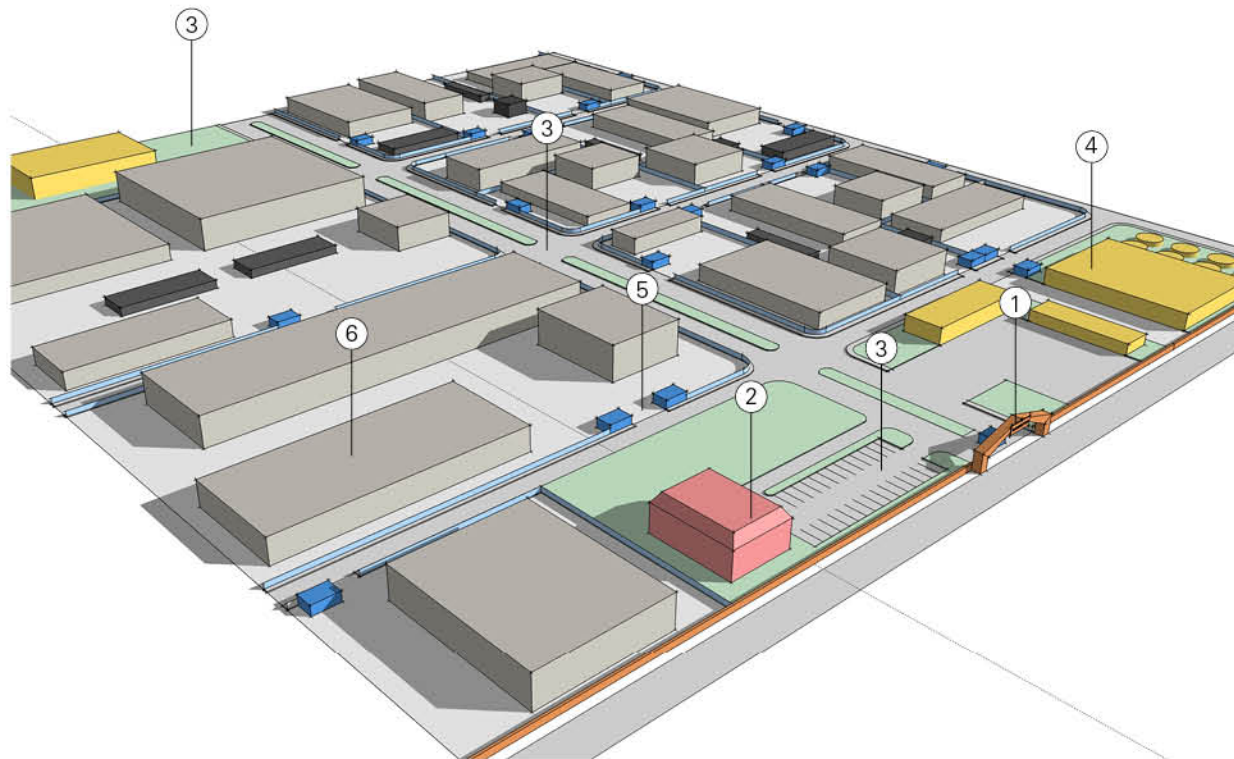
Economic Engine: Red River Delta

Industrial Parks are spread all over the Delta. It is obvious that their location is always next to a trade route to guarantee the supply and distribution of goods. Industrial parks are concentrated around the two big trade centers in the delta: Hanoi as the capital and Hai Phong as the harbor city. Besides IP's exists Export Processing Zones (EPZ) which produce just for the export market.

Three Development Corridors

The Red River Delta underlies a general strategy which targets the industrial development in spatial corridors. The corridors reach from Hanoi across Hai Duong to Hai Phong, Viet Tri across Bac Ninh to Ha Long and from the city Thai Nguyen across Hanoi towards the city Ninh Binh by passing Phu Ly. The corridors always follow important trade routes which are connecting the most important cities of the delta. The corridors are not mandatory for implementing an industrial park so several parks can be found outside these areas.

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1) main gate and parking park fences



2) representative management building



3) infrastructure: road network and green areas



4) power substation, sewage plant



5) factory guard tower and site fences



6) factory building

The Industrial Park Model

An industrial park is a gated area that is fenced. It has a main gate and is protected by security (1). It is mostly located next to a trade route. Near the main gate there is usually located a representative management building for the park administration (2). The park is screened and divided in different sized lots. Between these lots there are two lane streets, parking lots, storage areas and green spaces (3). The park has its own power and water supply (4). Every lot is leased by a company and separately gated (5). On these lots the companies are free to build their own buildings fitting to their needs.

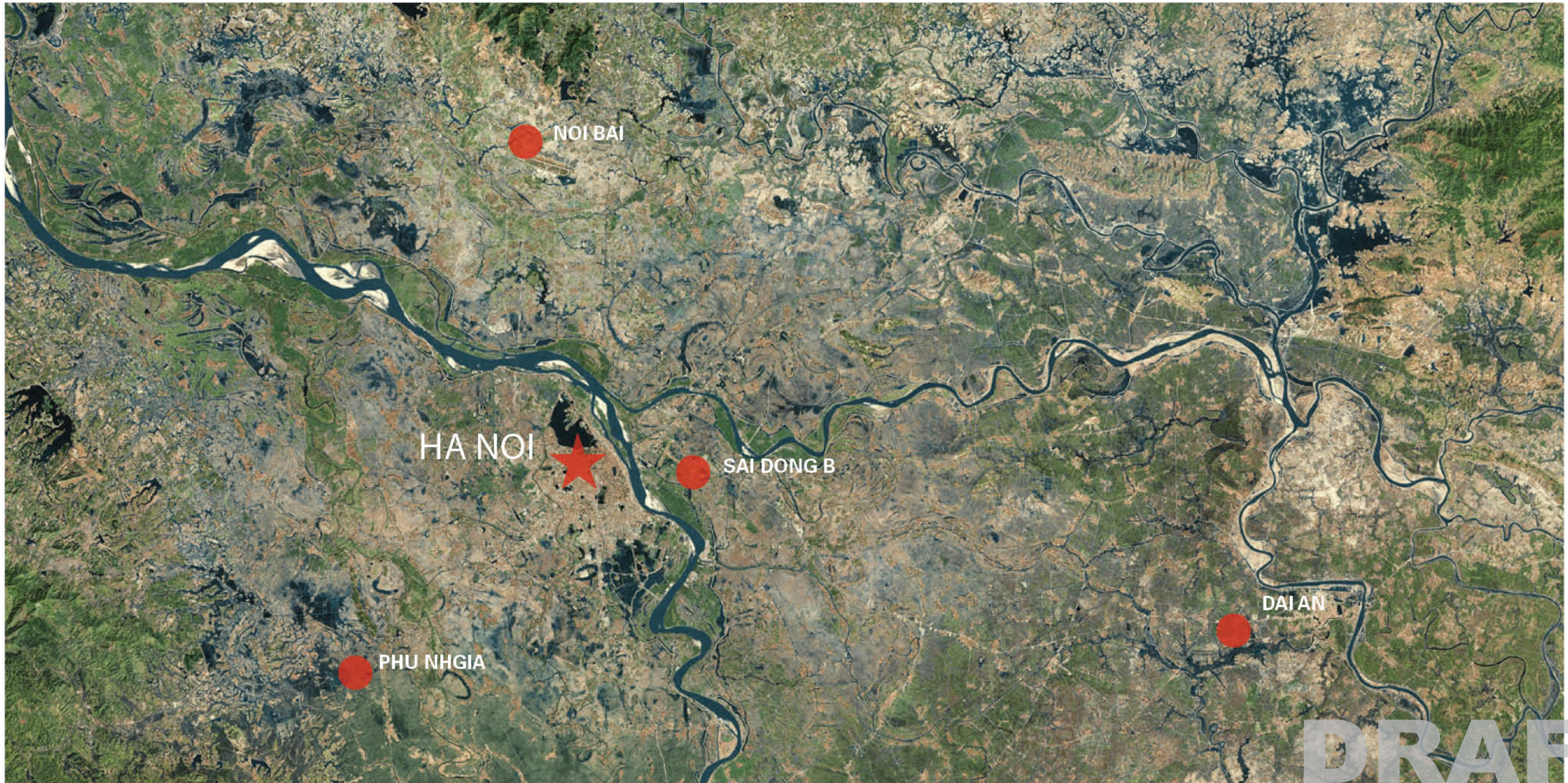
Vietnam's Industrial Impulse

All the industrial parks in Vietnam show the same kind of structure. Of course there are some slightly small differences between them which appeared during the times, but in general the basic structure and function is always the same.

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TRANSFORMATION PROCESSES

After explaining the initial situation that led to the development of industrial parks and clearing their location and structure the following chapter will focus on the impact of those parks in their surroundings. From the obvious land transformation to the appearing urbanisation processes towards the change in the social structures and the living conditions. Despite the fact of this short term development the changes in this particular fields are tremendous. They also differ between rural and urban areas that influences those developments.



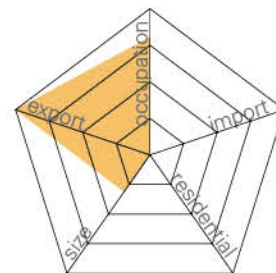
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IP (EPZ) ‘Noi Bai’

The export processing zone Noi Bai was the first park which was established in northern Vietnam in 1994. Noi Bai was incorporated by a joint venture of foreign and local companies: Vista spectrum (Malaysia) and Urban infrastructure development investment corporation (Vietnam). In the IP Noi Bai there is a labor force of 14.000 workers employed who 30% are from the Soc Son district.

Total size	100 ha
Occupied	100%
In Use	80%
Export	100%
Import	0%
Residential housing	0%
Social Services	0%



IP ‘Dai An’

The industrial park Dai An was established in 2004. It was implemented in two phases. The first phase occupied an area of 174 ha. The second phase was implemented and had a size of 474 ha. In the park there are many different companies located that employ a labor force of 16.000 workers. Of the 16.000 workers there are 3.000 residents in the park.

Total size	648 ha
Occupied	80%
In Use	68%
Export	70%
Import	30%
Residential housing	30%
Social Services	0%



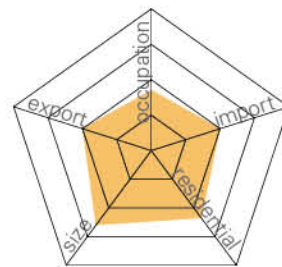
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IP ‘Phu Nhgia’

The park was established in 2007 by government law clearance exclusively by Vietnamese investors. The implementation happened in two phases. The first phase occupied an area of 170 ha. 2009 the second phase was implemented and had a range of 68 ha. In the park there are 60 companies located that employ a labor force of 8.000 workers.

Total size	238 ha
Occupied	100%
In Use	40%
Export	50%
Import	50%
Residential housing	30%
Social Service	30%



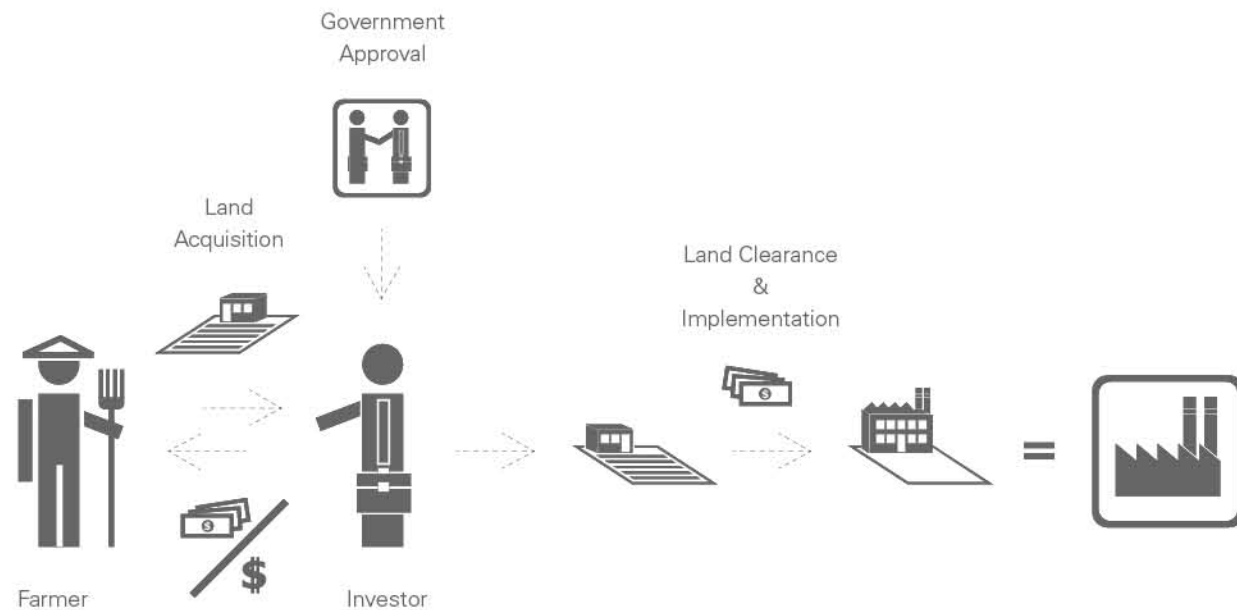
IP ‘Sai Dong B’

The industrial park Sai Dong B is one of the closest ones to Hanoi and also one of the oldest in the Red River Delta. The close location to the city brings great advantages, but a larger expansion gets more difficult. In the park there are around 20 to 30 factories located that employ 3.500 worker. Almost all of them come from the surrounding areas.

Total size	85 ha
Occupied	100%
In use	75%
Export	45%
Import	55%
Residential housing	30%
Social Services	30%



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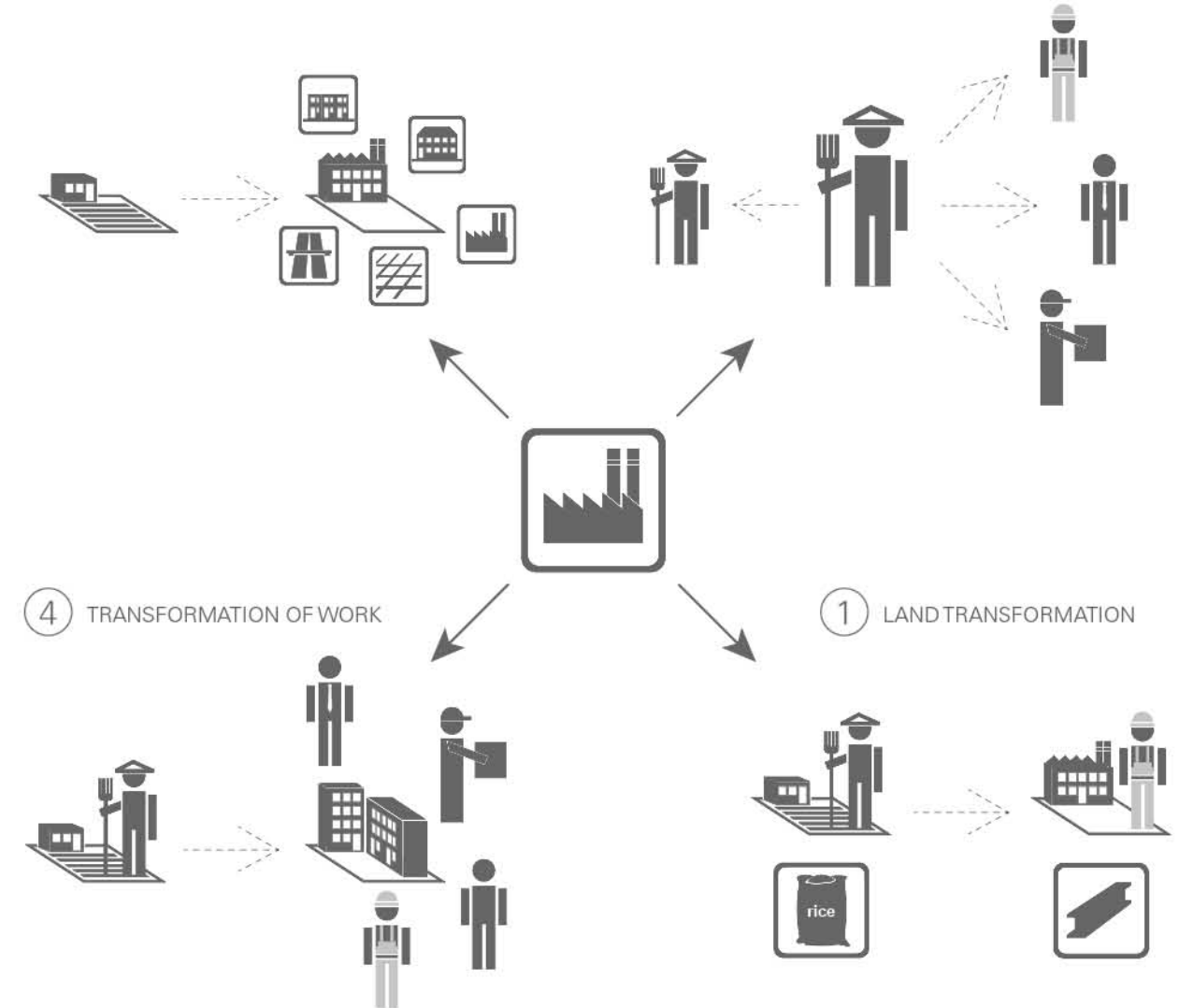


Foundation Process

The foundation process has four phases. First of all there is one or several local or foreign investors that decide to invest in implementing an industrial park. Then the government has to approve the request of the investors and agree on their planning's. The second phase is the land acquisition. The investors step up to the farmers to buy their lands to realize his industrial park. After achieving a settlement the investor assign the right to use the land. This phase takes the longest time because there are hundreds of farmers that make the agreements tedious. The third phase is the realization and real implementation of the park. First he has to construct a sufficient infrastructure with streets, power and water supply. After that the park is ready to contain all kinds of different companies which are constructing their factories. In the fourth phase the productions starts.

2 URBAN TRANSFORMATION

3 SOCIAL TRANSFORMATION



Industrial Parks as Catalysts

- 1.) **Land transformation:** The implementation of an industrial park of course transforms the land from fields in industrial lots with factories. The production of goods shifts from food to industrial products.
- 2.) **Urbanization processes:** Also the surrounding areas are transforming. New infrastructure, highways, schools and apartments are constructed by the need of the many workers that are employed in the park.
- 3.) **Social structural shift:** Because of the implementation of an IP the former society changes. Before all locals were farmers and lived equally together. Now former farmers become workers, land lords or merchants. So a community in which all members were equal becomes a society of individuals where differences in wealth and living conditions occur.
- 4.) **Change in living and working conditions:** This change is pretty obvious. Previous farmers who were working in agriculture on the fields become workers in factories or merchants in the industrial and service sectors. This development changes also their living conditions.

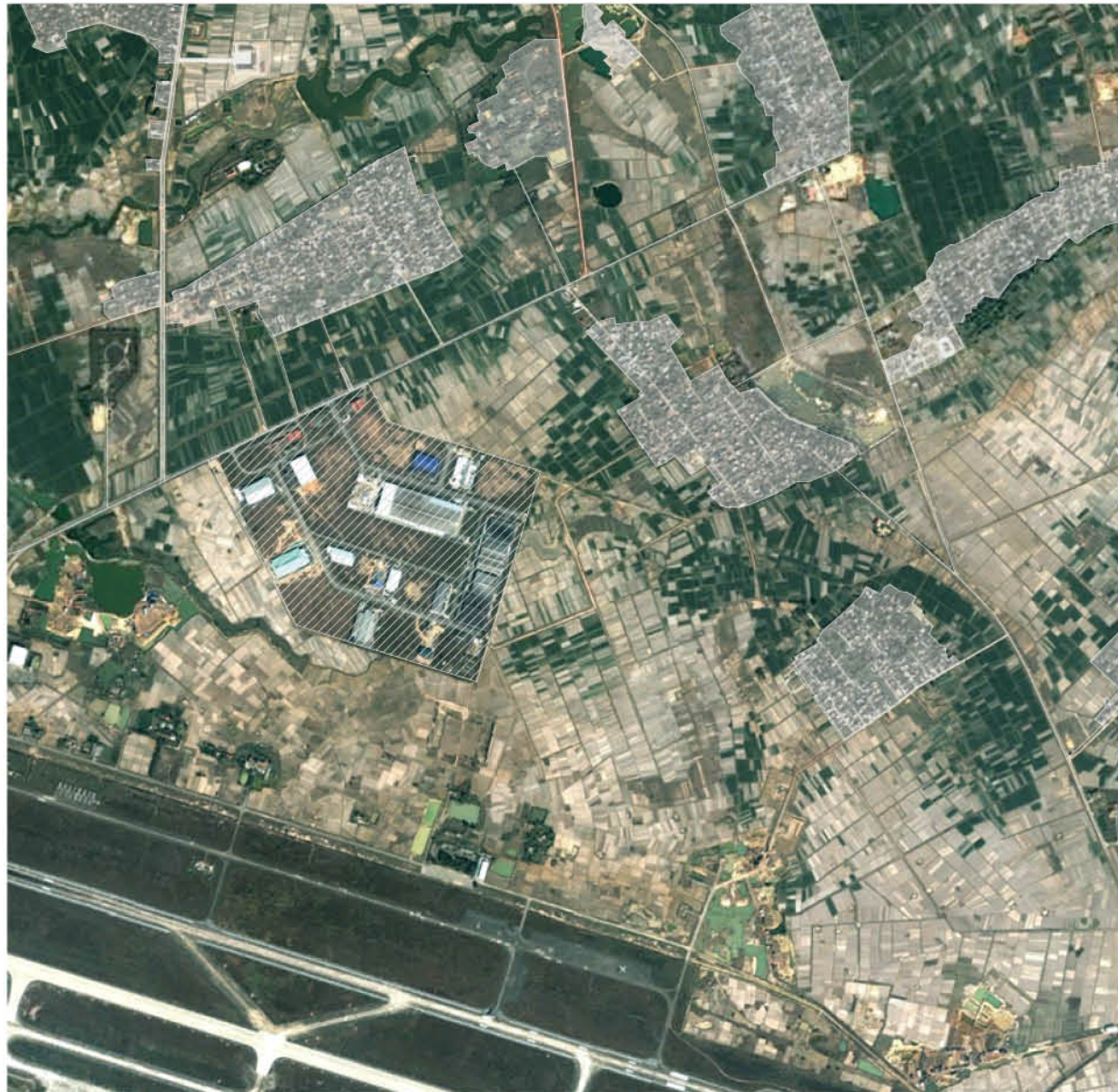
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Transformation of Landscape & Urban Growth

In the last decades Vietnam showed a fast change of landscape. During the last years countless building projects were realized. Former farm land is just transferred in buildable land and occupied by massive projects. Huge housing plans and city extensions are planned and realized in the last years independent if they are needed or not which probably can be blamed on a profit orientated stock market or just misinvestments. Especially industrial parks play a big part in the transformation of land. Their implementation shapes the land to their needs with infrastructure like highways, roads, power plants, buildings and factories.

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First IP in Northern Vietnam

This map shows the industrial park (EPZ) Noi Bai around 1999 in the first phase. The park measured 50 ha and is located between the Noi Bai International Airport and several rural villages. The park management has build different infrastructures like streets and sewage systems in the sourrounding area. Since the foundation of the park the nearby villages has experienced a densification.



Rural Catalyst

The second map shows the park around the year 2010. In the last 11 years a second phase was added and expanded the park to 100 ha. By comparing the two maps the transformation of landscape and urban growth is obviously. The implementation of the industrial park Noi Bai catalyzed an urbanizing process in the rural area. Mostly infrastructure but also in the growth of the surrounding villages.



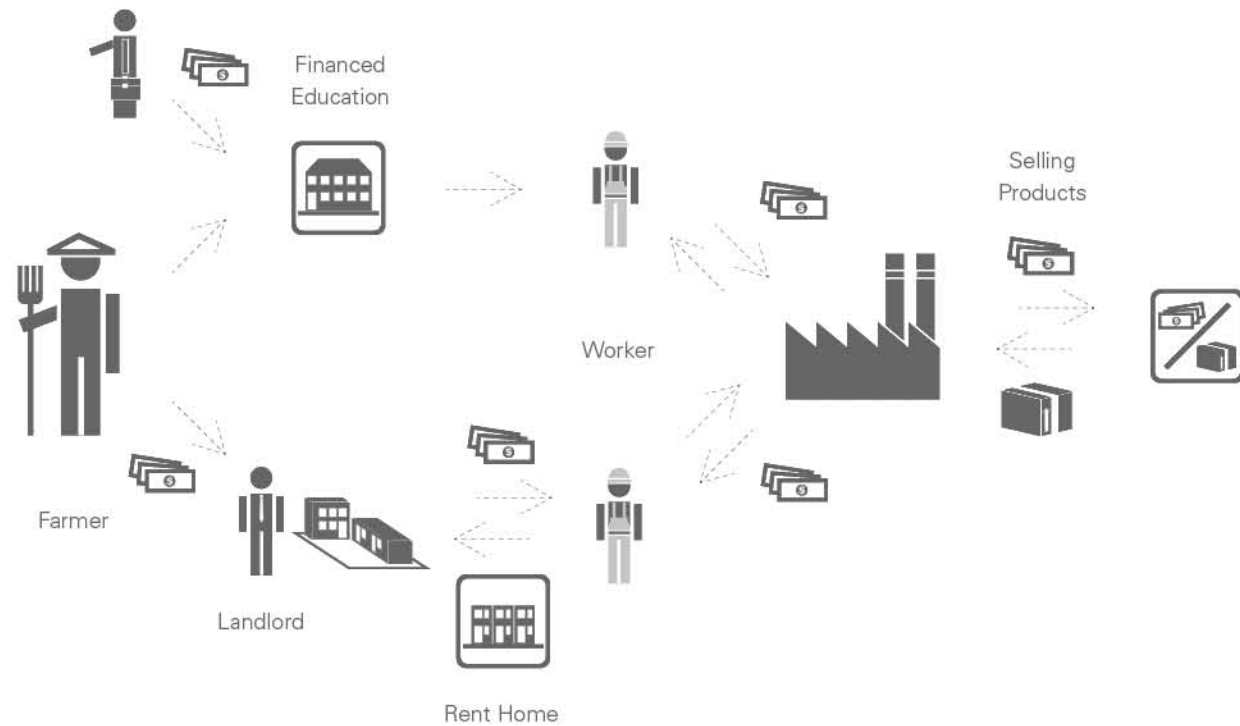
Industrialization On The Edges

Sai Dong B is also one of the oldest industrial parks in the Red River Delta but on the opposite to Noi Bai it is located nearby Hanoi and not in a rural area. The map shows the park in 1999. It is evident that the situation at this stage is quite different. Sai Dong B is closely surrounded by urban structures and very limited in its expansion possibilities. There is already sufficient infrastructure and also enough labor force available.

Urban Catalyst

Compared to the first map this one shows the Sai Dong B park 11 years later in 2010. It accures that the park hasn't changed in size but it's inner structure densified. Especially the surrounding area has under run a huge urbanization process. A new highway and new streets were established as well as new housing projects. On top of that new small industrial parks have appeared and the nearby villages have grown in their sizes and become more densified.

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Industrial Development

The process from being a farmer to another profession has many different paths. One of them is that the farmer sells his land to an investor. The investor offers him a job in a factory in the proposed industrial park. So he undergoes training in a school or training facility and gets the knowledge to become a worker who earns his livelihood in a factory in this industrial park.

Another way is that the farmer enhances his left property with the money he got from selling his farm land and builds boarding houses. Then he rents this boarding houses to the worker that work in the factories so that he becomes a land lord.

Economic Transformation - When Farmer Become Worker

The transformation that is started by the industrialization transforms former farmers into factory workers. This process has accured in the last hundred years many times all over the world. It is a necessary adaptation to a new environment. In this particular case a farmer nearby an industrial park has the chance to change its profession for better living conditions.



Pull Factor

An industrial park offers a lot of opportunities for employment. That's the reason why so many people are attracted to move into the surrounding regions. This map shows an example for an industrial park and its catchment area.

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Multifarious Working Conditions

The working conditions in an industrial park are quite different to the conditions on the rise fields. A change on dependence happens. Farmer are depending on the weather and workers are depending on their company which is much more reliable. The working conditions differ quite a lot on the company, the sector, the location and the job. Furthermore the heritage of the company can make a big difference for example European companies have to ensure higher standards than the Vietnamese companies. The employment in the “new” Vietnamese industry is multifarious. From the textile industry to a heavy industry all branches are represented.



Production For The Masses

Many foreign companies are sourcing out their production to Vietnam from European high quality producing companies to heavy industrial Chinese companies. Because of this wide ranged field the standards on the produced goods vary fairly a lot. There are European companies which only source out their production because of the cheap labor. They bring their own management, their own construction contractors, their own suppliers and their own machines. They set up their factory without any help from Vietnamese partners. Oppositional there are local companies that work together with all kinds of other companies that help them to set up their production. They hire local contractors to set up the factory and buy machines from foreign and local countries. The only thing which every company has in common is the big and cheap amount of labor force. Every company invests a high amount of money which has to pay out after a couple of years ensure that the companies are producing in a non-mechanical mass production - for example a modernized assembly line.



Heavy Industry



Toy Factory



Security



Handmade?

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Alternative Industrial Parks

The industrial production of goods in Vietnam didn't just start 25 years ago with foreign companies. There were also former industries that provided the population with the essential goods that were needed. Like in an industrial park many companies form a kind of spatial collaboration to produce their own products. Those structures reach back many generations and are still producing their goods like they did several decades ago. They grew their businesses and relationships over the years so that they could stay competitive. Those alternatives to industrial parks don't have to compete with them because of completely different produced products.

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Scrap Metal Industry

This is the native steel production facility. A conglomerate existing of several companies producing steel and wire by recycling scrap metal. There are no working guidelines, no safety regulations and no head management that supervises the company.



Healty Work Space

This kind of industrial production facilities differs quite a lot from those in the industrial parks. There are no asphalted streets, no gates and no security that protects the factories. There are no environmental restrains why the work conditions are quite unhealthy and also a big burden for the surrounding world.



Waste Recycling

In this poor environment every recourse counts and so the waste of the steel and wire productions is recycled and turned into profit. So that this kind of industrial cluster produces not only labor in the steel industry but also other occupations.



Adjusted Merchants

Also other businesses are attracted by this kind of industrial phenomenon. For example merchants that open their business in the steel cluster in former sheds and sell food and drinks to the workers that are working in the factories.

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Handicraft Dynasty

This village is specialized in producing all kind of wooden furniture. But in contrary to an industrial park all the companies are producing the same products and form business connections and partnerships to support and help each other. They form spatial hubs to minimize their expenses and ensure their supplying needs.



Specialized Village

The local companies started as family businesses and expanded over the years. Now many of the family companies have hundreds of employees. Now they are managing the company and sell the goods to customers or merchants in the bigger cities. This kind of business formed an own village which is specialized in producing particular products.



Expression Of Prosperity

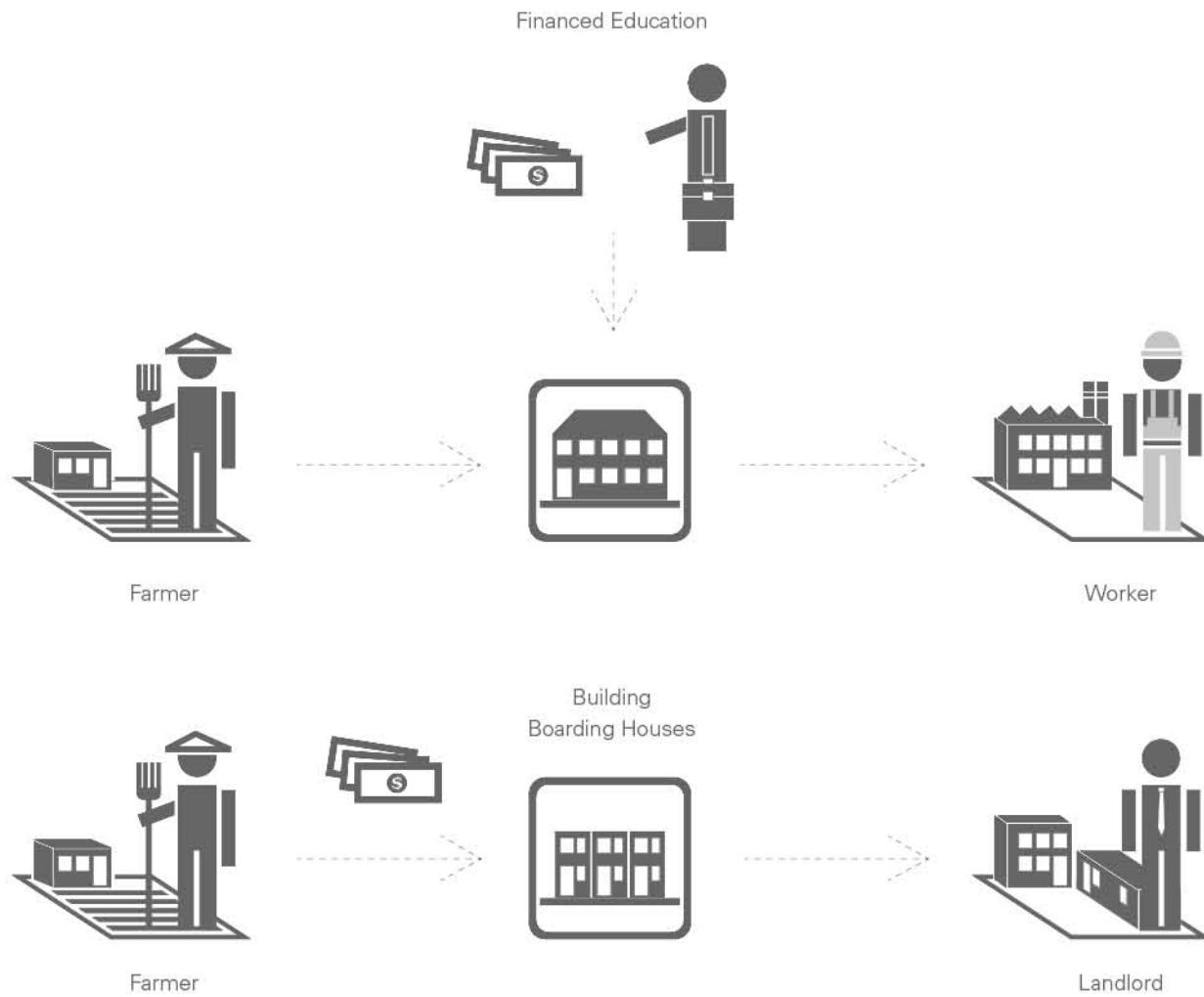
The family businesses are existing for many generations and have constantly invested and expanded their companies. Those families show their success and handicraft skills in fascinating facade decorations.



Female Power

In almost every sector the labor force is dominated by female workers. Women are working in every field and sector. In most factories the amount of female workers is over 70%.

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Farmer



Worker



Landlord



Merchant



Specialist



Social Services

Transformation of Society - The Social Shift

Due to the influence of an industrial park the former society which was uniform and consists only of farmers now becomes a pluralistic society which has many different kinds of people and professions. A local farmer becomes a worker in an industrial park, a landlord, a merchant or a business man. With this development comes a social structure that divides people from one another. Social differences appear because there are people who are wealthy and have a bigger influence than simple farmers or workers. Even specialists are moving to these villages because of the great need for them. For example, doctors or other highly educated people move to the urbanized rural areas to start their own businesses. This all ends in a society shift from an equal community to a social pyramid.



Housing Typologies

Because of this whole massive social structural changes the living conditions change too. Around the industrial parks there are several different types of living conditions. They reach from informal housing over normal boarding houses to big fancy and individual villas. This surely reflects the social differences the best. From the poor worker that moved to his working sight to the foreign high educated specialist that manages a business. There are two major kinds of propositions for housing. The small scaled boarding houses which are offered in the villages by locals and big appartment buildings supplied by foreign investors inside the industrial park area.

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Work Where You Sleep

In the informal self-grown industrial clusters the workers are exclusively migrants from other locations. They sleep in small sheds in the factories for free. That means that their working space is also their living space. Usually those inhabitants have the lowest and poorest living standards. Surprisingly they earn much more money than workers in industrial parks.

Vietnam's Boarding Houses

These are the usual quarters for the non-local employees who work in an industrial park. It is a one room apartment with one toilette. The room is commonly shared between three workers. It's size is around 9 square meters plus toilette and a small cooking niche. Mostly these boarding houses are occupied by young women between the age of 18 and 26. They almost spend their earned money completely on their subsistence.

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Wealthy Locals

Locals are living in much better conditions than labour migrants. Those are mostly the farmers that sold some of their property (rise fields) and build shops or boarding houses with it. So now they earn their money by supplying the industrial park workers with their essential daily supplies like shelter or goods.



Step By Step Housing

There are also many residential housing projects that were implemented by the industrial park investors. In this case they also build first common boarding houses until there are enough tenants. After that a big residential apartment-building is constructed in which the workers are moving in. The average rent is between 50 and 80 US \$ per month. So the investors follow a step by step policy contrary to the local land lords who build first and rent then.



Craftsman Housing

Many industrial parks are now obligated to supply residential housing. Most of this housing typologies are meant for the higher better educated or experienced workers in the factories. Those houses have much better standards than the boarding houses or apartment buildings. Those buildings have more space, warm water and heating. That's the reason why the living costs are much higher than in the common apartment buildings and boarding houses.



Upper Class

The most expensive homes are the villas for the upper class. They are located inside the industrial park compound and secured 24/7 by security guards which are financed by the park management as well as the construction of the buildings and their services. The houses are single standing villas with an own private yard. Those houses are just affordable for the highest employees of a company like business managers. The costs are about 2'500 US \$ a month.



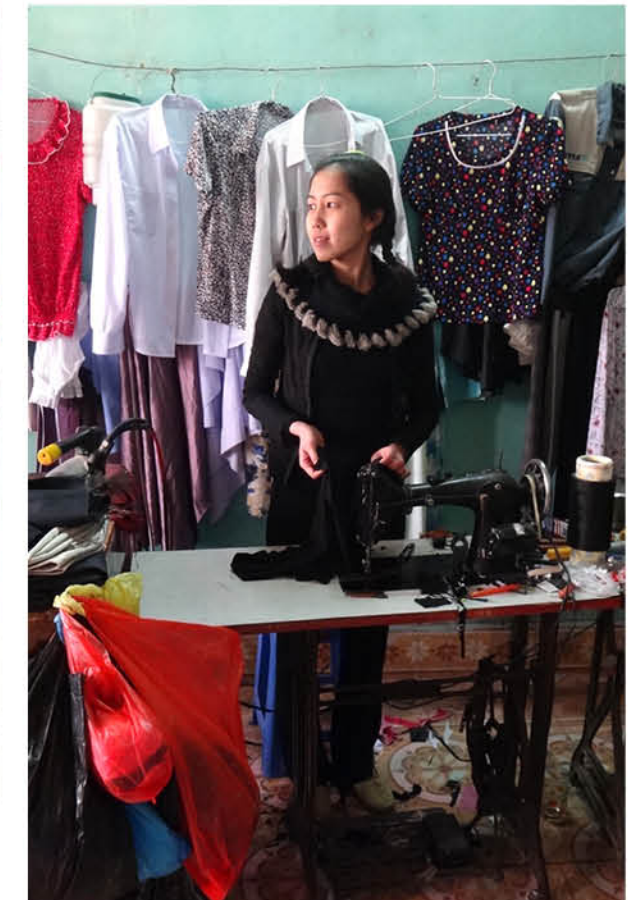
No Plans For The Future

By analyzing the phenomenon of the industrial parks in Vietnam you can find a huge amount of differences compared to the industrial zones in Europe or other industrialized countries. For example the living and working conditions or the salary. Surprisingly there are also some similarities like developments in social structures and the urbanization processes. The biggest difference by far is the lack of future prospects. Many of the common workers just live from one day to another without thinking about tomorrow.



Enjoy The Little Things

It seems like the mentality is focused very hardly on the here and now. The future is far away. So many people don't save money for the uncertain future. They spend it on small pleasures like new motorbikes or haircuts. This is a common way of life in Vietnam. Show what you've got and be proud of it then others will admire you. It is nothing wrong with this lifestyle but a question appears: How will it be in the future?



Smart Service

Shrewd entrepreneurs like tailors have settled down in villages and earn their livelihood mostly by offering special services for the needs of the factory workers. This seems to be a predictable and smart business plan in the contrary to the usually not existing plans of the workers.



What's Next?

The industrialization process and its phenomenon in the industrial parks have had several effects on different fields of Vietnam. It seems to be that this development has now reached its crossroads due to the fact that the latest decree by the Prime Minister of Vietnam has stopped all future industrial park projects. That raises the question: 'What's next?'

DRAFT
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