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MIGRATION TO ROADS
THE TRANSFORMATION OF XUAN MAI

A NEW PHENOMENON
THE OLD AND THE NEW From Rural to Urban
Two Ways of Living
Infrastructure
Land Market
Building Process

## ON THE ROAD <br> Abandoning the Fields

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## A NEW PHENOMENON

In the past years, a new type of settlement has emerged in Vietnam. However, in the assigned research project we put the main focus on the Red River Delta. Since the agriculture has decreased recently, people have had to find alternative ways to earning a living. Consequently, this settlement not only constitutes a living space, but does also combine industry and commerce. It is characterised by its street-orientation. As a result of this, numerous houses with direct street-access have been built. One house is followed by another, shoulder to shoulder. Typically, there is just one row of houses containing fields in the back of the buildings. The new settlements appear in a completely different profile in comparison to the olden traditional villages.


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- Migration to Roads -


elaborated, while the two long sides, directly detached to the neighbouring house, are mostly without any windows. The shop is located either in the front of the house or inside on the ground floor. Usually, the house has at least one terrace, for example on top of the roof overlooking the street.

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## THE OLD AND THE NEW

In the conducted research study, we focused on the town of Xuan Mai located around 30 km to the west of Hanoi. It has undergone significant changes over the past 200 years. Predominantly, the village has rapidly expanded due to its location next to a bigger street crossing. The old traditional village was added by a new type of settlement along the street. Migrants from all over the Red River Delta have moved to Xuan Mai. Whereas the inhabitants of the old village still work in the agricultural fields, the dwellers along the street mainly work in the service sector. The difference in employment mani-
fests itself also in the way of living.



## The Location

Xuan Mai is located on a bigger road crossing. The road in direction to the west leads to Hoa Binh, the one to the east o Hanoi and the southbound road to Cho Ben. The road in northward direction heads to the Satellite City Hoa Lac which constitutes the end of the newly built Highway to Hanoi

DRAFT
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## From Rural to Urban

In its beginning, Xuan Mai was a traditional village on the countryside. Over the time, it has increasingly grown due to different pull factors such as the improvement of the streets and the settling down of the military. Since less people can live solely on their income from the agriculture, alternative
sources of income have had to be considered. As a result of this, people from the surrounding area mi grated to Xuan Mai because of its profitable location and thus an increasingly urban-oriented lifestyle has emerged.


Three Villages
1800 There were 3 old villages: Xuan Mai, Tien Truong
Bui Xa. Most of the villagers worked in the agriculture.

## Road Development

1946 After the war, the Vietnamese constructed several roads in order to improve the connection between Hanoi and its surrounding areas. Through Xuan Mai, one road from Hanoi to Hoa Binh and a road towards Cho Ben were built.

## Settling of Military

1975 The Cubans gifted a 30 km long road towards the Son Tay Province in the north. There was the decision from the government to transform Xua Mai into a city achieve this aim, the military built an Orange Farm in order to raise food for the soldiers during the time of war. Consequently, more and more people from the military settle down in this area $\qquad$

Settling of Civil People
1980 New areas around Xuan Mai emerged. A huge university campus was built. As a consequence, civil people moved to Xuan Mai. Additionally, the road connection had to be improved for the transport of building materials since there was built a new hydropower station in Hoa Binh.


## History

The history of Xuan Mai goes back over 200 years. It has been transformed from a rural village to an urban area


## ull Factors

There can be named three main reasons why people move to Xuan Mai. Firstly, there is the Forestry University which attracts students from all over Vietnam. Secondly, a large military base and educational centre are located in Xuan Mai. Additionally, its location on a busy traffic route exerts another pull.

$8^{\prime} 972^{\prime} 558 \mathrm{~m}^{2}$


## Statistical Data

Above, the main statistical parameters of Xuan Mai are mentioned: the distance to Hanoi, its location on a crossing, the number of square meters of its area and the number of population. The last named excludes the number of soldiers which live
military campus.
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The New


## The Old

The structure of the old part of Xuan Mai has remained its original state. It appears in the typology of a traditional ural village. Both, the village as a whole and each plot are surrounded by walls. The pagoda constitutes the political and religious centre. The economic basis is the agriculture Each plot has its own garden used for growing vegetables or stock breeding. Additionally, every villager is in charge of different rice fields in the surrounding area. Some of them have an alternative employment in the new settlement. The daily life is characterised by a strong community


## The New

he structure of the new Xuan Mai is more street-orien
ated. The plots are narrow and long since the taxes are
defined by the width of the facade along the street. As the ground price is expensive, the plot is used to full capacity. In contrast to the old village there is no need and space for garden. People work either in the home-based shop or commute to the surrounding bigger cities for business. Th cmmunity life is anonymuly organisal The not identify themselves with the town but far more just eem as inhabitants of the street.


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As shown in the previous chapter, the two settlements have not only a different architectural structure but also differ in several other levels. On the following pages, we want to introduce two inhabitants but also differ in several other levels. On the following pages, we want to introduce two inhabitants
of Xuan Mai: one from the old village, one from the new part. Their lifestyles contrast significantly regarding various aspects such as the house typology, the family structure and way-of-life, the employment, leisure time activities, religious beliefs as well as in the social status.
© ETH Studio Basel

$1: 200$
2. Altar
3. Living/ Sleeping Room
4. Kitchen / Dining room
5. Chicken Shed
6. Old Pigsty
7. Water Tank


Mrs. Yen, 73
Mrs. Yen was born in Xuan Mai village. She has lived her whole life in the same house. The household exists of other four people: her son, his wife and their two children. Her husband died two years ago. The whole family works in the agriculture. In order to earn some additional money, her daughter-in-law sometimes works as a builder.


Spirituality
Since most of the inhabitants of the old village believe in spiritual forces, they often carry out religious rituals and ceremonies.


## The Self-Sufficient Unit

The plot has two one-storey high buildings. The former contains the living and sleeping area, the latter includes the stalls for the animals and the kitchen. Whereas they merely have some chickens today, they used to keep pigs and buffalo a few years ago. The garden is used for growing vegetables and fruits, but only for the private purpose.

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1. Pharmacy
2. Living Room
3. Bathroom

5 $\square$ 4. Parent's Bedroom
5. Backyard
6. Kitchen/ Dining Room

1 : 200


Mr. Nho, 49
Mr. Nho was born and raised on this piece of land. His parents migrated from Hoa Binh Province to Xuan Mai 60 years ago. He lives with his wife and his two children. He could take over parts of his parents' land, located directly on the street. After his marriage, he built the house for his family. He runs his own business in the market of Xuan Mai.

## Modern Lifestyle

They have wooden curved furniture, hardwood floor, a new kitchen and sanitary facilities and the latest electronic gadgets.


The Extension
At the moment, Mr. Nho is extending his house by a shop in the front. His wife intends to quit her job in the nearby hospital in order to open her own pharmacy


## Different Generations

The total piece of land extends over 100 m . Initially, Mr Nho's parents owned only a small plot. Over the time, they were able to acquire more and more land. Today, the land is subdivided between the family members from the different generations. The family life is defined by a strong cohesion.

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The infrastructure of Xuan Mai covers a wide range of different areas since it is highly diversified and mostly well developed and thus results in a rather urban appearance. In most cases, the infrastructure is used by both, the old and the new parts. The various institutions and the supply of electricity are predominantly organised by the state. The range of employment covers all three economic sectors. Numerous migrants have settled down in order to benefit from the good infrastructure and the better professional perspectives.
(c) ETH Studio Basel
1:15'000
1 Administration Office
Military Campus
Military Campus
Pagoda
Pagoda
6 University of Forestry
5 Market
College of Agriculture
Primary and High School
Infrastructure
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## Military

The military settlements extend over large areas. They contain two bigger bases, one of them is an educational campus. Mostly, the military areas are under strict security, They act as more or less independent and separated units within Xuan Mai.


## University

In Xuan Mai, the large campus of the Forestry University is located. The educational institution operates as an important employer. Around 325 people work there. The university's main field of study is the resource management of sity's main field of study is the resource management of
Vietnam's environment. There are students from all over Vietnam who usually only stay for their studying period in Xuan Mai and then move away again.


## A Hierarchic System

The residential areas of the old village and the new Xuan Mai are divided into different units. The inhabitants of each unit elect their representative. The representatives of these units meet on a monthly basis in order to discuss current ssues. Every 2,5 years, they elect a new chairman. He and
the communist leader, who is appointed by the communist party, meet the different ministers of Xuan Mai on a regular basis. Xuan Mai has eight Ministers which are in charge of the different de has
© ETH Studio Basel


## Market

The Market can be considered the salient connecting point of the different settlements. On the hand, the market is the place where people from the old and from the new part encounter and communicate with each other. It constitutes the social centre of Xuan Mai. On the other hand, the market is the main trading place where industrial products such as clothes, household goods and processed food as well as agricultural products, predominantly rice, meat and all kinds of vegetables, are offered. While the industrial products are imported from throughout Vietnam and eve from abroad, the agricultural goods come from Xuan Mai itself or the surrounding region.


## Pagoda

The pagoda is located in the old part of Xuan Mai. It is used for political as well as for religious purposes. It is not only the place where the political assembly meets, but does also serve as a location for spiritual rites of the Buddhists.


## Medical Clinics

Xuan Mai is well provided with medical institutions. It has three main clinics: the Military Clinic 24, the Xuan Mai Public Clinic and the private Quang Hang clinic. Primary and common diseases are treated locally, while more complicated operations are usually transferred to Hanoi or to other bigger cities.


## Electricity

The electric system is supplied by the state and is generally in a good condition. The electricity network was introduced in the late eighties. Ever since, all the households are connected to it. It reaches even to the old village However, the residents have to pay charges according to their amount of consumption.


## Water

There is no public water supply system in Xuan Mai. The houses either need direct access to the groundwater or store water in tanks. Most of the inhabitants use filter machines in order to gain clean drinking water. Since there is no system to prevent sewerage, people just let a huge amount of water drain into the ground.


## Connectivity

Whereas most of the residents, even in the traditional old village, have a mobile phone and a TV, only a few own an individual computer with Internet access. As a result of this, some villagers regularly visit an Internet coffee. Most $\square \square$ people watch th
there are a num
used.


## From Farmer to Lawyer

The activities in Xuan Mai cover a wide range of different areas. The whole service sector is situated alongside the street. For example, day by day people install stands for the sale of goods. By contrast, there is a also a large mount of fixed shops because most of the families offer some kind of service. These shops usually serve as a second source of income. Alternatively to a street-based tivity a lot of people work in the market They either sell heir self-produced agricultural goods or offer importe products. The people from the old village often work in the agriculture. Even though, it is getting more and more difficult to earn enough money with only the agriculture. A lot of dwellers use the ideal location with close access to good transportation possibilities to commute for work to larger cities in the surrounding area. The industry is also epresented along the street. Especially the construction industry is booming. Additionally, there is a large amount of soldiers which are based and work on the military campus'. In Xuan Mai, you'll find also a lot of people which are involved in the university, either they are students or they work there

SPINAGH SUGAR BEET

## POTATOES SALAD

RICE PINEAPPLE
CHICKEN BEANS


$n^{8}$


## - Street Sale, Shops, Services; Industry <br> - Market <br> - Agriculture <br> - University <br> - Military

## Activity Distribution

All the different employments are located in specific places and areas around Xuan Mai which suit their requirements best. The shops, the services and the industry are concentrated along the street. The market is located where two busy roads cross. The agricultural fields are situated around he old village The commuters leave the town for thei work. And the military areas lies near the boundaries of the residential land.

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$\square$ Street Sale

$\square$ Shops

$\square$ Services


$\square$ Market

$\square$ Agriculture


ص Industry

$\square$ University
$\square$ Commuters

© ETH Studio Basell


Welcome to Xuan Mai
The people who live alongside the street are mostly mi-
grants from the surrounding area. Only a few of them grew
up in Xuan Mai itself. Its great location on a bigger road
junction is the main reason for their movement.


| (1) Hung Yen | (7) Ung Hoa |
| :--- | :--- |
| (2) My Duc | (8) Xuan Mai |
| (3) Hanoi | (9) Ha Tay |
| (4) Nam Dinh | (10) Hoa Binh |
| (5) Ninh Binh | (11) Phu Tho |
| (6) Truong Yen | (12) Nam Dinh |



## Different Origins

Out of 12 interviewed households, only one comes from
Xuan Mai itself. The residents moved from the old village to a new house along the street. The other households mostly come from the region of the Red River Delta. The inhabitants of one house even migrated from the Ha Tay Province in the South of Vietnam

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Land Market
In Vietnam, the land is under the control of the government. The latter allocates the land to organisations and individuals by granting the so-called Land Use Rights. In order to do this, the state has to elaborate zoning plans to define the different types of land use. Whereas an immense increase of the demand for building land, especially along bigger roads, can be observed, the request for agricultural land decreases significantly. As a result of this, the government transforms more and more former agricultural land into building zones. Further interventions by the state such as for example the release of Master plans, e.g. the one for Xuan Mai, have great impacts on the land market. They initiate speculations and boost the market.

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## Land Use Rights

The Land Use Rights are allocated by the state for either agricultural or residential purposes. They are defined by the so-called Land Law. The holder is provided with certain rights such as the right to lease, to inherit or to trade the and. The Land Use Rights are written down in the Land Use Certificate which the government issues. The certifi cate constitutes of the name of the owner the exact size f the plot it location the use of the land This size ment is used when trading a particular piece of land in the open real estate marke

## Dual System

The Land Market in Vietnam is divided into two differently organised markets. The primary market is controlled by the government. The state allocates land at low non-market prices to companies and private people for permanent and sustainable use by granting the Land Use Rights. Consecutively, the second market comes into force. The Land Use Rights are traded amongst the individuals. The price is based on the relation between demand and supply.


## The Street, a Price Affecting Facto

since the plots directly on the street are the most favoured The more pices for them are accordingly the highest, prices are. A second price difference can be observed with regard to the crossing. In other words, the nearer to the crossing, the higher the prices are. The prices for a plot near the crossing and directly on the street are enormously high compared to the same plot located a bit further away. By contrast, interesting is the fact that an adjacent house doesn't seem to have an influence on the price of a plot.

he family owns a piec
of land with one house

$4 \begin{aligned} & \text { the escond son and his wife get a piece as } \\ & \text { well and the parents buid a new house }\end{aligned}$

the daughter moves away to her husband and
one son maries his wife and gets a piece of
$2 \begin{gathered}\text { one son } \\ \text { the land }\end{gathered}$


5 another migrant buys a piece of lan


$3 \quad \begin{aligned} & \text { a migrant buys from the } \\ & \text { tamily a piece of land }\end{aligned}$


6 two families want to move closer to
the street and buy each a piece of land
subdivison to
family members
subdivison to
foreigners


## the neighbours

## Land Division

After the land allocation by the state, the land owners start subdividing their land, especially the precious and mostwanted one directly located on a street. The owner either sells part of the plot to foreigners or passes some pieces of the land on to his children and their families. Nowadays, there is a permission needed to divide the plot. An officer measures the new plots and issues new certificates of Land Use Rights. Due to this process, the once big plot is ransformed into several smaller and longer units.


Zoning Plan 2008, Xuan Mai

## Land Use

There is a zoning plan for Xuan Mai that defines all the and according to its use. It is made by the government in Hanoi. It is extremely hard to change the land use and it is only possible in very specific cases. For example, if you want to transform agricultural into residential land, you have to undergo a complicated and drawn-out procedure n reality, the zoning plan is in accordance with its present building situation.

Building Process
The designing and building processes are organised rather informally. For this reason there isn't any professional education system. Consequently, the knowledge is passed on from one person to another, directly on the job. In Xuan Mai, the construction industry is booming since a lot of new people have settled down in this area and have built new homes. There are only few restrictive laws concerning the building process in Xuan Mai. It is only since August 2012 that you need a permission to build a house. Another restriction declares that it is not allowed to build houses higher than seven storeys. The designs of the principal facades are strongly influenced by the French colonial style. The facades along the streets are characterised by an uniform appearance.

© ETH Studio Basel


1 influence of french
colonial houses

influence of
already existing claddings

## Copy Paste

A new house is either inspired by its neighbouring houses or the houses in Hanoi, but all in all it is strongly influenced by the French colonial style. The design and the structure always follow the same parameters. In most cases, there is no professional architect involved. The designs and floor plans are defined by the owner himself with the help and knowledge of the builder's chief. After the Administration


2 sketch


6
brick filling

9 different floors
and application of
ornaments
and application of
ornaments


Office issued the building permission, the construction can start. The houses are built in a concrete and brick structure which is plastered in the end. From the beginning of the construction of an average-sized house until the moment when the owners can finally move in, it takes around five months.

armoring

5 concrete base and

> pillars


7 ceiling frame年
ground floor


10
 painting

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## Learning by Doing

The owner chooses a company boss. Together they discuss the building ideas and make a sketch. They orient themselves on already existing buildings. The company boss, who himself usually has no professional education, employs 4 to 8 builders. They are "learning by doing". The
material supplier delivers the material and the owner has to pay it according to its weight. There is no insurance for the workers but a lot of accidents happen on the construction site due to unsafe working conditions.


Material
Most of the material is coming from material suppliers located along the street to Hai Phong. They deliver the material to the local shops in Xuan Mai. From there, the mate rial is brought to the construction site. One ton cement costs around 1'000'000 Dong which corresponds to about 48 USD. In the past, people primarily used bamboo and imber; today they changed to a structure out of concrete beams filled up with bricks.

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## ON THE ROAD

In conclusion, we once again want to put the focus on the reasons that cause the migration to roads and its impacts on the society. The network of these settlements along the roads defines a micro- ur ban system within the Red River Delta. The road becomes not only the centre of trade but also is it the location of a new lifestyle. As a consequence, everyone is eager to take part in this development and thus wants to get direct access to a road. Since Doi Moi, the liberalisation of the market as well as the whole society proceeds permanently. This transformation is reflected by the new settlements along the streets which are defined by new characteristic features compared to the conventional village or city.



Ambrogio Lorenzeeti, Effects of Good Government on Town and Country

## The Old Dichotomy in Change

Originally, the terms town and countryside could be seen as polar opposites. In the Middle Ages, the border between the city and its surrounding area was clearly defined by the city wall. Each side had different rights, employments and living conditions. While the rural dwellers supplied the city with food and commodities, the city offered manufactured products and services in return.
The rural-urban dichotomy intends to define two contradictory parts that differ on several levels including occupationand environmental differences, differences in the size of population, as well as in the social stratification. However, such a clear-cut division is not possible anymore today. The oundaries between the two poles fade increasingly sinc the countryside features more and more urban characteristics.

## How is Xuan Mai a Village?

One can call Xuan Mai a village because of its rural location. Since it is completely surrounded by rice fields, the agriculture is still an important characteristic. Furthermore, the structure defines it as a village. The whole settlement has developed along the main street with a centre in the middle, the market.

## How is Xuan Mai a City?

Firstly, Xuan Mai can be named a city because of its diver sified infrastructure. It offers a variety of all different kinds of services. Secondly, there is wide range of employments. Both the secondary as well as the tertiary sector are
strongly represented. Consequently, there is a social diversity. The whole settlement is organised as political entity. In addition, except from the old village, Xuan Mai reflects he anonymity of a city. People may know their next-door neighbours, but overall the communal life is rather impersonally organised.

## Neither Fish nor Fow

On the basis of the the previous arguments, Xuan Mai today is neither a village anymore nor (yet) a city. A clear definition is impossible since the conventional categories seem not suitable to describe this new type of settlement anymore. Both elements of a village as well as characteristic features of a city are recognisable. To conclude, Xuan Mai is a settlement emerged around the crossing of two streets, without clearly defined boundaries, with a market as the geographical and social centre and a rather modern urban infrastructure terk in llat nomical sectors. Consequently, the residents are socially diversified. The political entity© ETH Studio Base


## Abandoning the Fields

As we have seen in the previous chapters, people move away from the rural to more developed areas As a consequence, big parts of the Red River Delta, especially the surrounding areas of larger cities, get more and more urbanised. The new settlements act as a filter regarding to the city. It absorbs a huge amount of the rural-to-urban migration. This development has also a profound impact on the living structure of the people. The old characteristic features disappear and are replaced by new parameters which define the new urban lifestyle

© ETH Studio Basel


Population Density 2005

## Two Centres of Attraction

You'll find the highest density of people in Vietnam in the area around the two metropolitan cities Hanoi and Ho Chi Minh City. People increasingly move from rural areas closer to more urban regions. In addition to this development, here is a migration flow from the north to the south.


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MNMNANM%
MWNRNMNARA
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mmmmmm\mamm
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urban rural
2'306'000 20'755'000 $2^{\prime} 748^{\prime} 000$ 22'326'000 4’527’000 25‘645’000 $6^{\prime} 006^{\prime} 000 \quad 28^{\prime} 923^{\prime} 000$ $8^{\prime} 517^{\prime} 000$ 23'54'000 (242000 32546000 $17^{\prime}$ $\begin{array}{lll}11^{\prime} 360^{\prime} 000 & 48^{\prime} 512^{\prime} 000\end{array}$ 12'740'000 51'636'000 18'000'000 58'325'000 21'000'000 61'100’000 22'340'000 61'250'000

## 23'061'000

 25'074'000 25'645'000 34'929'000 $41^{\prime} 063^{\prime} 000$ 47'638'000 53'722'000 59'872'000 64'376'000 76'325’000 82'100'000 $83^{\prime} 590^{\prime} 000$Population Growth, 1950-2005

## Increase of the Urban

Over the past 60 years, the population has permanently grown. The percentage of the urban in comparison to the rural population has risen as well.


Second Choice
A lot of rural inhabitants want to move to a bigger city since the income of the agricultural work shrinks increasingly. However, only a few manage to settle down in the city itself. Firstly, the space in the city is rare and expensive. Secondly, it is quite difficult to get a permanent work and living permission for the city. Consequently, the people settle down along the arterial roads in the surrounding area of the city. From there, they either commute to the city for work on a daily basis or they find an employment in the outskirts.


## Natural Growth

Due to the population increase in the past and the coming future, the settlements grow permanently, in particular the ones situated on a bigger traffic route. Mostly, the village develops along the street in order to benefit from the additional sources of income. The villagers use the preferred location to open a shop and offer some kind of service for those who reside in the village or the ones which pass by


Along roads near a bigger city


Along roads near a bigger business


Along rural roads

## Rudimentary Logics

We defined three typologies for the different emergence of the new settlements. In the first place, they appear along mportant traffic routes in the outskirts of bigger cities. Furher, they can be found near enterprises and industries that re usually located on bigger roads. But they also emerge on smaller regional roads

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## Decrease of the Agriculture

Since it gets harder to earn enough money for a living solely with the work in the agriculture, people try to find alternative income sources. The street inhabitants work either in the secondary or tertiary sector.

## Access to Infrastructure

Nowadays, more and more settlements have a better
access to infrastructure and social institutions. Primarily because of the improved and widespread mobility. Regarding the education, this leads to an overall higher educational level, also for the rural inhabitants. As a result of this, they have better chances to get a job.

## Modern House as a Status Symbol

The modern Longhouse seems to be the mostly desired living form. It reflects the urban lifestyle and thus stands as a symbol for the social upgrade.


## Increased Mobility <br> Since the individual means of transport are low-priced, everyone has access to it. This results in the reductions of the distances and in a higher flexibility. One person is not bounded to only one place anymore.

## Loosening the Old Family Structure

In the original farmer family every member worked in the agriculture. As a consequence, the family made their living all together. Over the past decades, the family structure has changed significantly since everyone has his own and different occupation. Therefore, the family life has disbanded profoundly.

## Professional Choice

Since the Doi Moi, the process of liberalisation has started. As a result of this, free choice of profession was intro-
duced. Each individual is now able to define its own way of living. This opens up new perspectives especially to the youth. Since they do not have to carry out the same work like their parents, the young people in the rural areas are eager to leave the countryside in order to find a different employment as an alternative to the work on the fields.

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## IMAGE CREDITS

All graphics and photos by Christina Friedrich, Lea Glanzmann and students of ETH Studio Ba el FS12, except where noted.

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