

# Urban Gardening: An Alternative Food System for Self-Sufficiency

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# What issues will the paper focus on?

- Box plant
- *Hutong*, Beijing

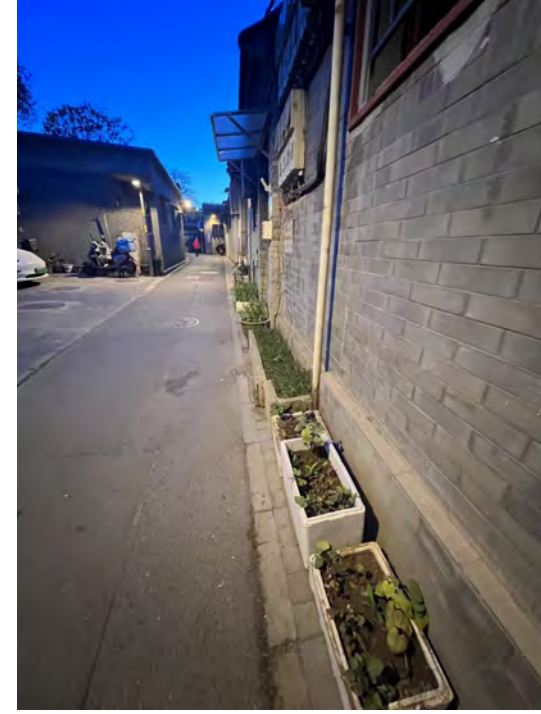


- What is urban gardening?
- The Value of Gardening (history, today and future)
- Diversity of contributions in the sufficiency of agri–food systems with case studies on Questionnaire of Food–Self Provisioning in Chinese Data and Observations
- Reality: an alternative food systems
- Difficulties and Challenges
- Conclusion

Let's start with two sets of photos. I don't know if you usually pay attention to gardening being in your daily life.

# Be everywhere: gardening urban at Beijing

This photo is only 500 metres from Tiananmen, the others are about 4,000 metres away .



The community gardening where I live is about  
4500 meters away from Tiananmen Square

22, Oct, 2024



# What is gardening at urban?



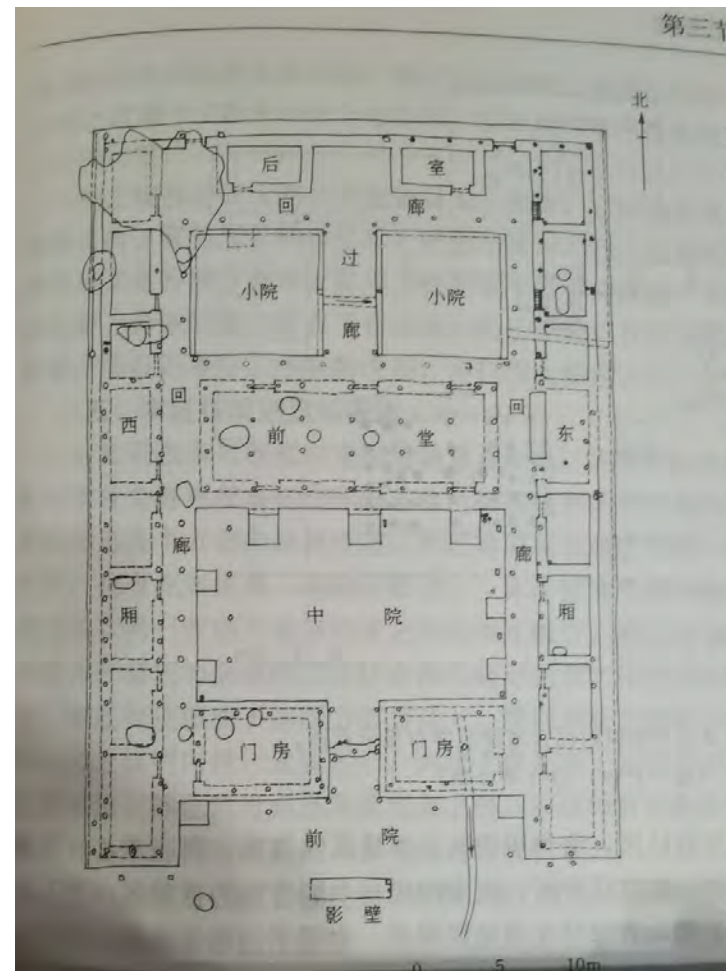
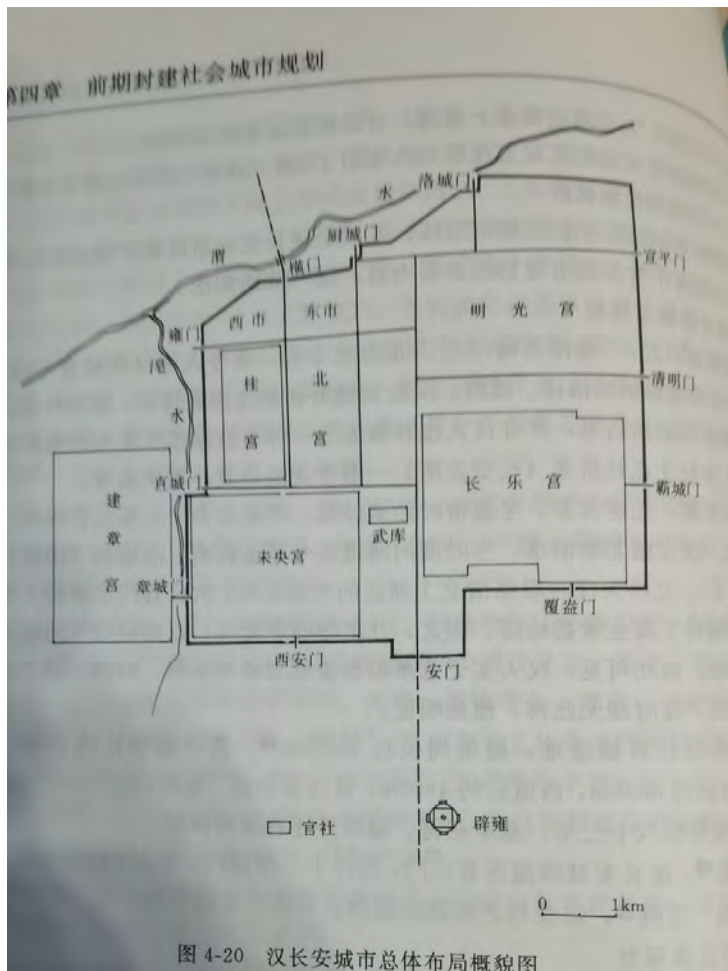
- The garden is one of the important legacies of the farming civilization, closely related to nature, to the earth, to life, and to the fruits of labor.
- Before the industrialization, it was the main carrier of the social and economic system, on the one hand, as material form, satisfying the livelihood of the family; on the other hand, it was the main source of the national tax revenue.
- Its attributes (functions): letting nature take its course, self-sufficiency, intensive farming, skill and frugality, saving for a rainy day. connect with mankind for over 5,000 years.

Ancient Chinese city planning: Their common feature is that they all layout farming or trade fair space in the urban area, including the palace.

Left picture shows the layout of Chang'an City in Han Dynasty (page 322);

The right picture shows the plan of the palace in Zhou Dynasty (page 181)

Cited from: He Yeju, *The History of Ancient Chinese City Planning*, China Architecture Industry Press, 2014 edition.



Since the founding of the Imperial City in Beijing, the emperors set up the Altar of Heaven, the Altar of Earth, the Altar of the Sun, the Altar of the Moon, and the Altar of the First Farmer, then worship the nature and farming things during the time of the 24 solar terms. (Photos from web.)



# What diversified contributions has urban gardening made to self-sufficiency in the agri-food system?



- In terms of material production:
- “A set of social practices outside the market economy that involves the production of food by non-farming households in residential gardens, on allotments and in collective (often urban) gardening projects which is, in many cases, accompanied by the non-monetized sharing of gardening produce in networks transcending the household” (Jehlička),
- which appear on its unique values in terms of sufficiency, regeneration, resilience, sustainability, etc. as well as maintaining people's reverence for nature, alleviating various pressures in urban life, and using leisure time with quality. (Huidi Ma).
- Promoting self-sufficiency in agri-food system in its many forms can go a long way towards saving for a rainy day, especially in uncertain times.
- 16th Oct, is World Food Day, with the theme of ensuring food security and achieving a sustainable future. Call on all countries to recognize the risks up by climate change. Alternative solutions besides commercial circulation are worth considering.

# What diversified contributions has urban gardening made to self-sufficiency in the agri-food system?



- At the level of mental constructs
- At the spiritual level, it was the bearer both of the 'natural genes' and 'cultural genes' of the human being, also a shelter for life and the mind, an imaging space that housed the way of life and labor, the aesthetics of life, leisure behaviors, emotional attachment, and values.
- Beneficial for urban-rural integration
- Beneficial for repairing human nature
- The photo on the left shows my friend picking food self provisioning on leased land during the COVID-19 pandemic to alleviate food shortages at the time. By Huidi Ma

# Case Studies on the Questionnaire of Food—Self Provisioning in Chinese Data and Observations

## Method and Path

Based on the 2019-2022 China-Europe cooperation Food-Self Provisioning(FSP) Questionnaire

follow-up survey with over six years on more than ten communities and over 100 households in urban/suburban areas of Beijing (in-depth interviews+observations+30000 words notes+ hundreds photos);

Qualitative Inquiry by cross analysis of anthropology, sociology, cultural studies, and urban studies



Questionnaire survey and field work



- In 2019, Chinese scholars participated in an international co-operation on a questionnaire survey on FSP, using the same type of questionnaire content. The questionnaire was administered to more than 2,000 people (families) on two separate occasions, covering most provinces and cities in China.
- The first time, in the summer season of 2019, 1,088 questionnaires were received. The second time, in March 2022 (during the pandemic), 1,333 questionnaires were received through an online questionnaire. 2050 valid questionnaires were received on both occasions. Hundreds of in-depth interviews and follow-up surveys were also recorded.
- The proportion of survey respondents living in towns and cities was 89 % and 94%.

# Questionnaire methods and pathway

- Questionnaire design – based on samples from the UK, Czech Republic and Hungary
- Questionnaire survey – questionnaires, interviews, in-depth interviews, case interviews, follow-up
- Distribution of questionnaires – effective recovery
- Data processing – SPSS\entry, uniform format of all raw data, data processing data analysis report
- The questionnaire has three parts:
  - Part I Questions for semi-structured interviews,
  - Part II questions concerns gardening
  - Part III Standard questions

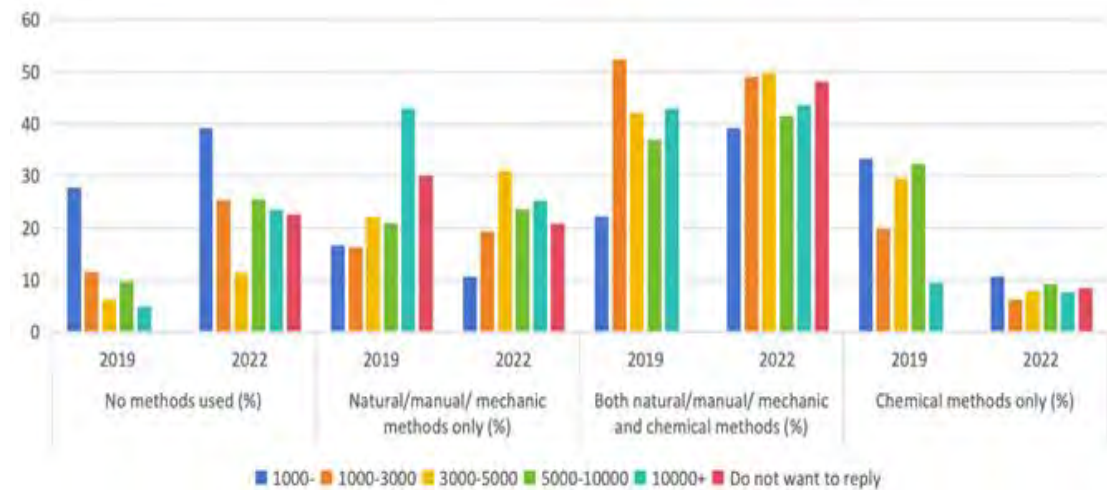
- Noted: These two photos were taken during fieldwork in Guizhou and Guilin at 23–27, March, 2019

By Huidi Ma

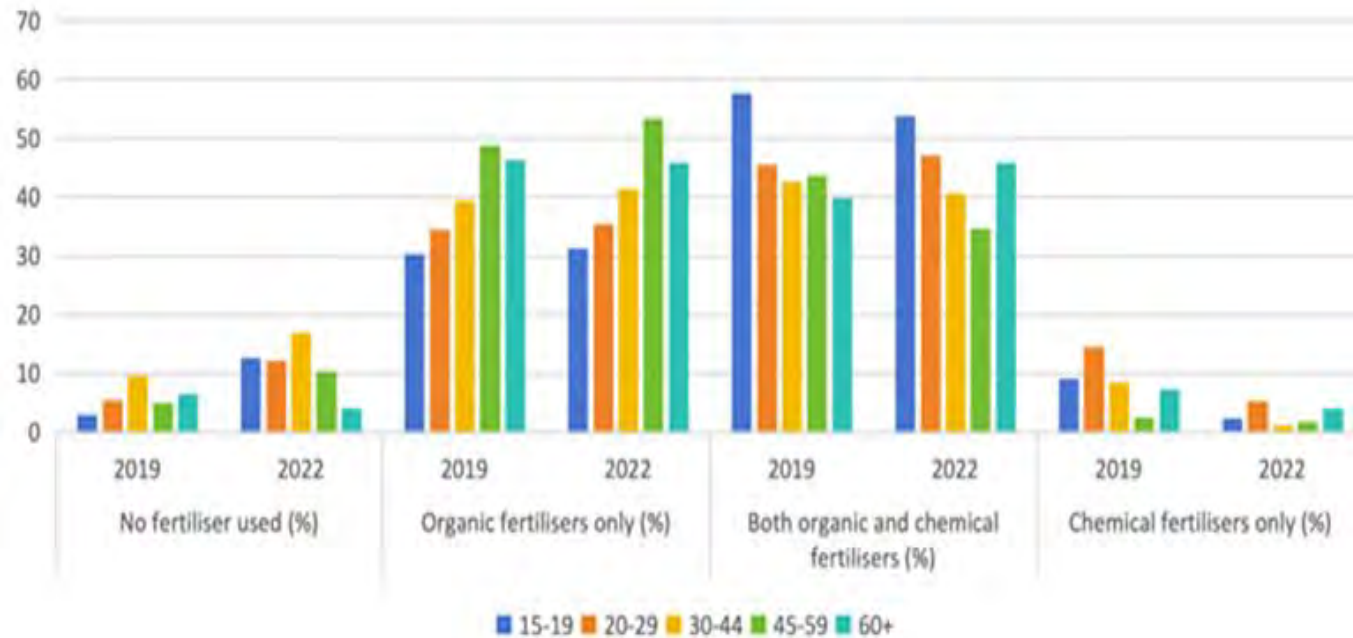


# Figure 1 , Method for Pest/Mould Control Crosstabulation: Perspectives from different income levels

- The percentage of respondents using only natural and manual methods of pest control grows with income while resorting to exclusive use of chemicals is more common for respondents with lowest incomes.

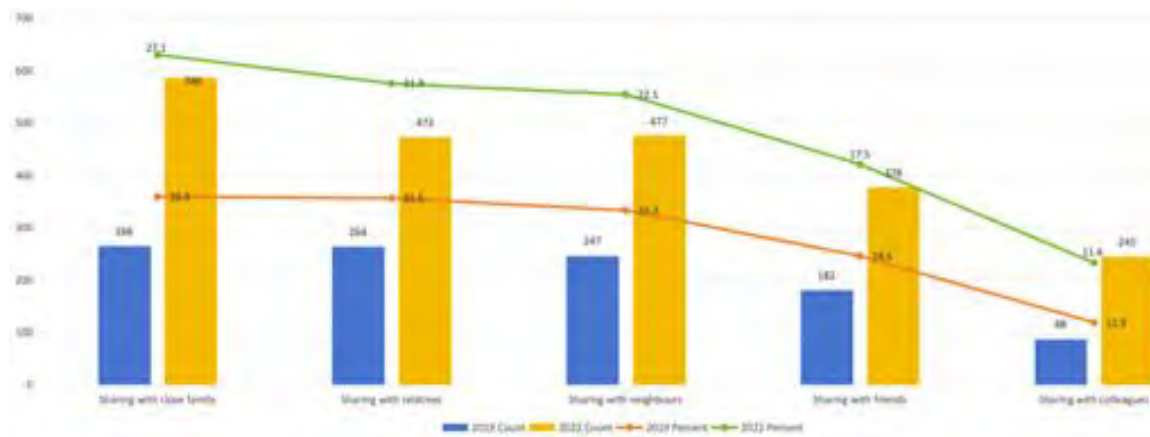


# Figure 2, Methods for Fertilization Perspectives from Different Ages



# Figure 3, Sharing of Self-grown Food

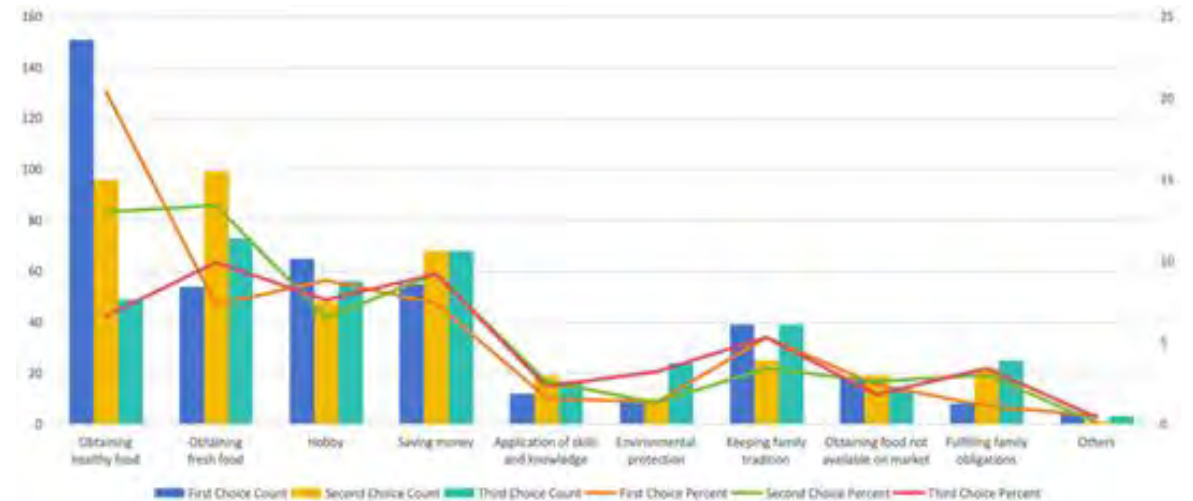
- Planting for sharing: nearly 80% of the respondents said that they were willing to share their self-grown fruits and vegetables, and nearly 40–80% of these were shared with their family, relatives and neighbours. This is a way to improve communication among the community and to gain a sense of accomplishment.



# Figure 4, Reasons for FSP (2019)

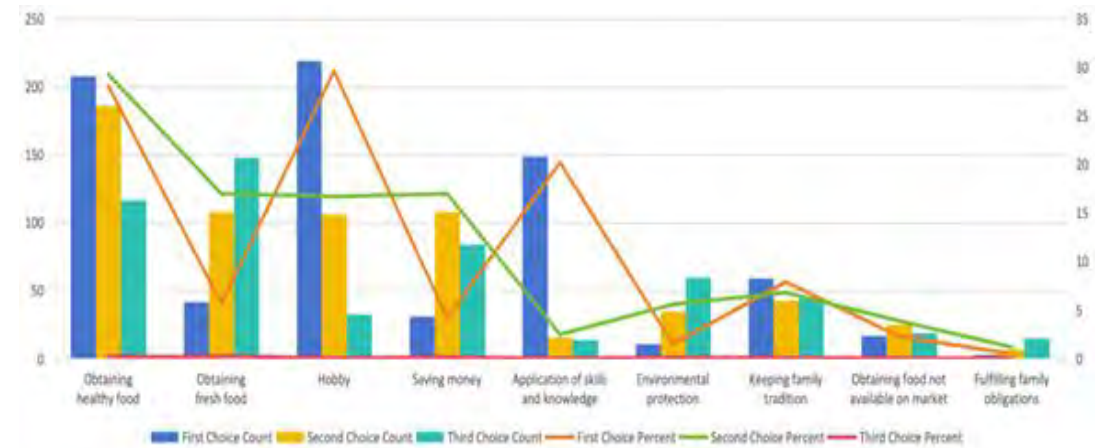
## A motivational perspective

- A survey revealed that the top motivations for people growing their own food are to access organic (ranked 1st) and fresh produce (ranked 3rd). Saving money comes in second (ranked 2nd). Rounding out the list are those who view it as a hobby and a way to spend leisure time (ranked 4th) and those who are continuing a family tradition (ranked 5th).



# Figure 5: Comparison data of 2022 and 2019

- Compared with the survey data from 2019, the proportion of younger cohorts participating in FSP was increasing during the 2022 pandemic period, especially for urban white-collar workers who only used balconies and plant box. In 2019, 166 out of the 334 younger respondents (aged 20–44), or 47.9%, reportedly have home gardens, while the percentage for 2022 is 74% (see Table 3).
- The phenomenon of young people using balconies to participate in food growing is consistent with our observations and investigations during the pandemic period.
- Compared with the survey data from 2019 and our in-depth interviews, during the city lockdown period in 2022, a considerable number of people helped alleviate their bad emotions and abate anxiety caused by food shortage.

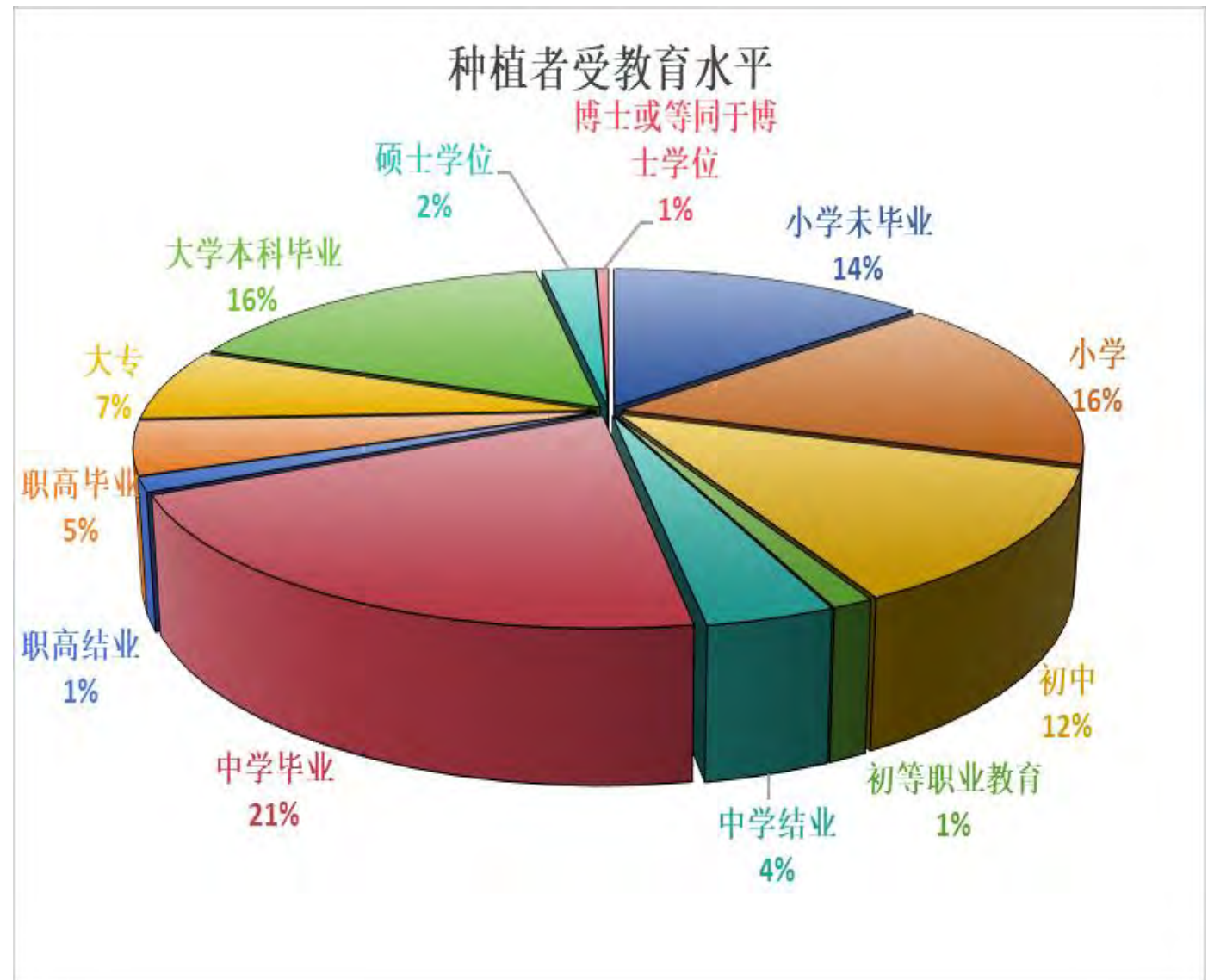


# Grower education levels

The map of 2019 survey data on grower education levels

From the perspective of educational level structure, this indicates that the majority of people participating in gardening are elderly. This is consistent with the phenomenon we observed.

Note: Special thanks to Wan Fangliang, a senior student at Ocean University of China, for creating these charts.



## Means of transport used to go to the farms

This is an option to look at environmental awareness.

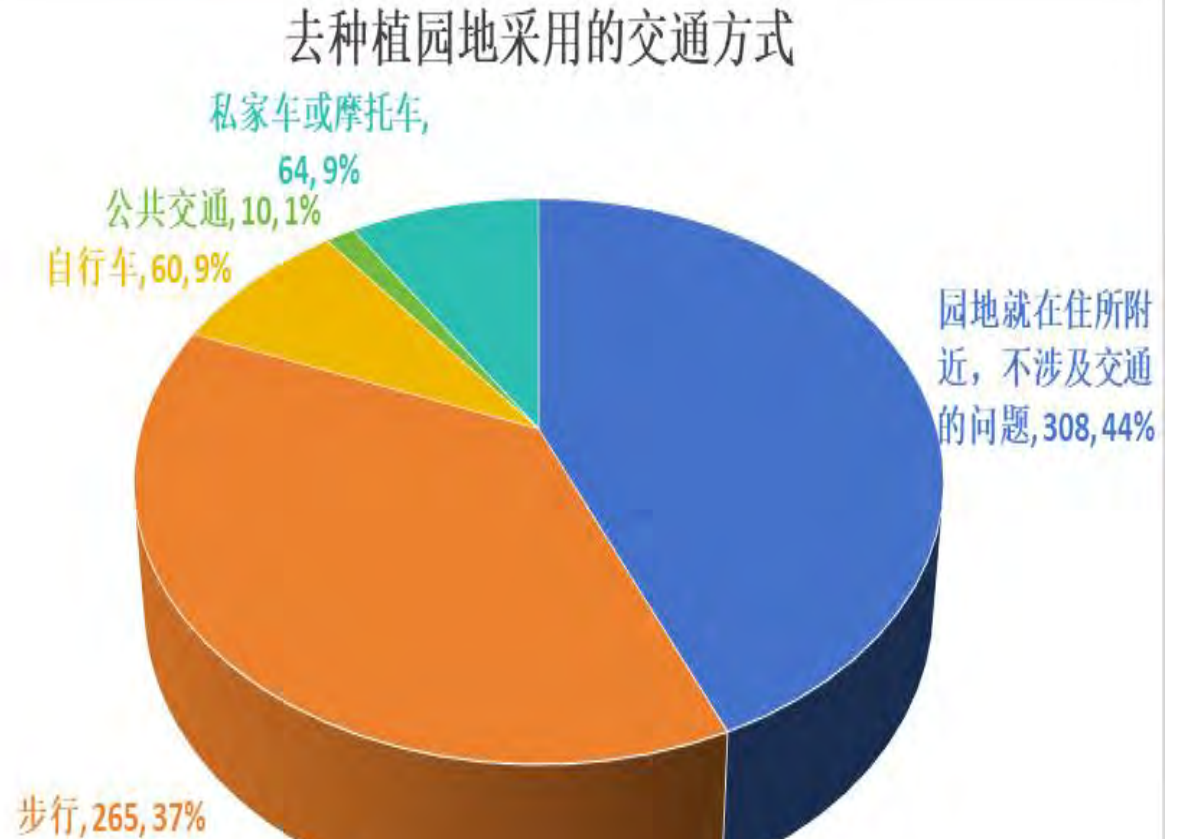
Those that do not involve traffic issues are usually gardening around their houses.

Most of those who walk or cycle do so for exercise and also not far from their gardens.

Those who take the bus or ride a motorbike who rent land in the countryside, both for exercise and to save energy.

Those travelling by private car are usually white-collar employers who go to the countryside (usually rent land or own houses in both the town and the suburbs ) on weekends to take care of their gardening.

Overall, people who appeared in our in-depth interviews were very environmentally conscious.



Note: Special thanks to Wan Fangliang, a senior student at Ocean University of China, for creating these charts.

# Reality and Possibilities: an alternative for agri—food system sufficiency



- Reality
- Why do we need an alternative of sufficiency consumption in urban?
- Look at our world today! “The ground is shifting under our feet. Anxiety levels are off the charts. We are in a climate meltdown. Extreme temperatures, raging fires, droughts, and epic floods are not natural disasters. We are on a wild ride, about to exceed the 1.5-degree Celsius global warming limit.” (Guterres, 2024)
- The earth is warning and punishing for humanity, and the crisis speaks for itself is being in grain and food production.
- Noted: box planting, Hutong(胡同) in Beijing

# Reality and Possibilities: an alternative approach to achieving agri— food system sufficiency in urban areas while reducing waste

- (Photos from the <https://cn.bing.com/images/search?view=detailV2&ccid>)



- With the intervention of food technology, people have questioned the safety of food.
- New forms of food circulation, such as: genetically modified foods, fast food, pre-made meals, and online shopping have not only changed people's lifestyles and behavior, but also created a large amount of food packaging waste and new environmental pollution, degraded people's autonomy and initiative at body-mind, and the emergence of multiple cancers and various strange diseases cannot be ignored, so aroused people's enthusiasm for planting

# Reality and Possibilities: Against climate change and a turbulent world.


- (photos from <https://www.nps.gov/articles/000/victory-gardens-on-the-world-war-ii-home-front.htm> )



- The future is full of uncertainty, with the risk of war (even total war) is increasing, in addition to climate change.
- History teaches us that far-sighted governments still encourage people to 'make more gardens.'
- During the First and Second World Wars, people around the world planted 'Victory Garden'. These gardening's vegetables, fruits and herbs provided nourishment for ordinary citizens and helped storage more food for soldiers during the war.

# Reality and Possibilities: a profound understanding of "sufficiency" in traditional Chinese culture

- Possibilities
- Firstly, China is a 5,000-year-old agrarian civilization, and deeply nurtured by Confucianism, Buddhism and Taoism, with understand of 'sufficiency'——: In Confucianism, 'Every day we have a bowl of coarse rice, a scoop of fresh water, and live in a small house, however we are able to live in peace and easy. In Buddhism, vegetarian food is lies in limiting desires and participating in the preservation nature by individual cultivation. In Taoism, it is in accordance with heaven and earth, and should not act against heaven.
- with a quiet state of mind can be educated; with diligence and frugality can be to virtues. (Zhuge Liang)



## 老子

老子(约前571-前471年), 又称老聃、李耳, 是我国古代伟大的哲学家和思想家、道家学派创始人。其被唐皇武后封为太上老君, 世界文化名人, 世界百位历史名人之一, 存世有《道德经》(又称《老子》), 其作品的精华是朴素的辩证法, 主张无为而治, 其学说对中国哲学发展具有深刻影响。在道教中老子被尊为道祖。

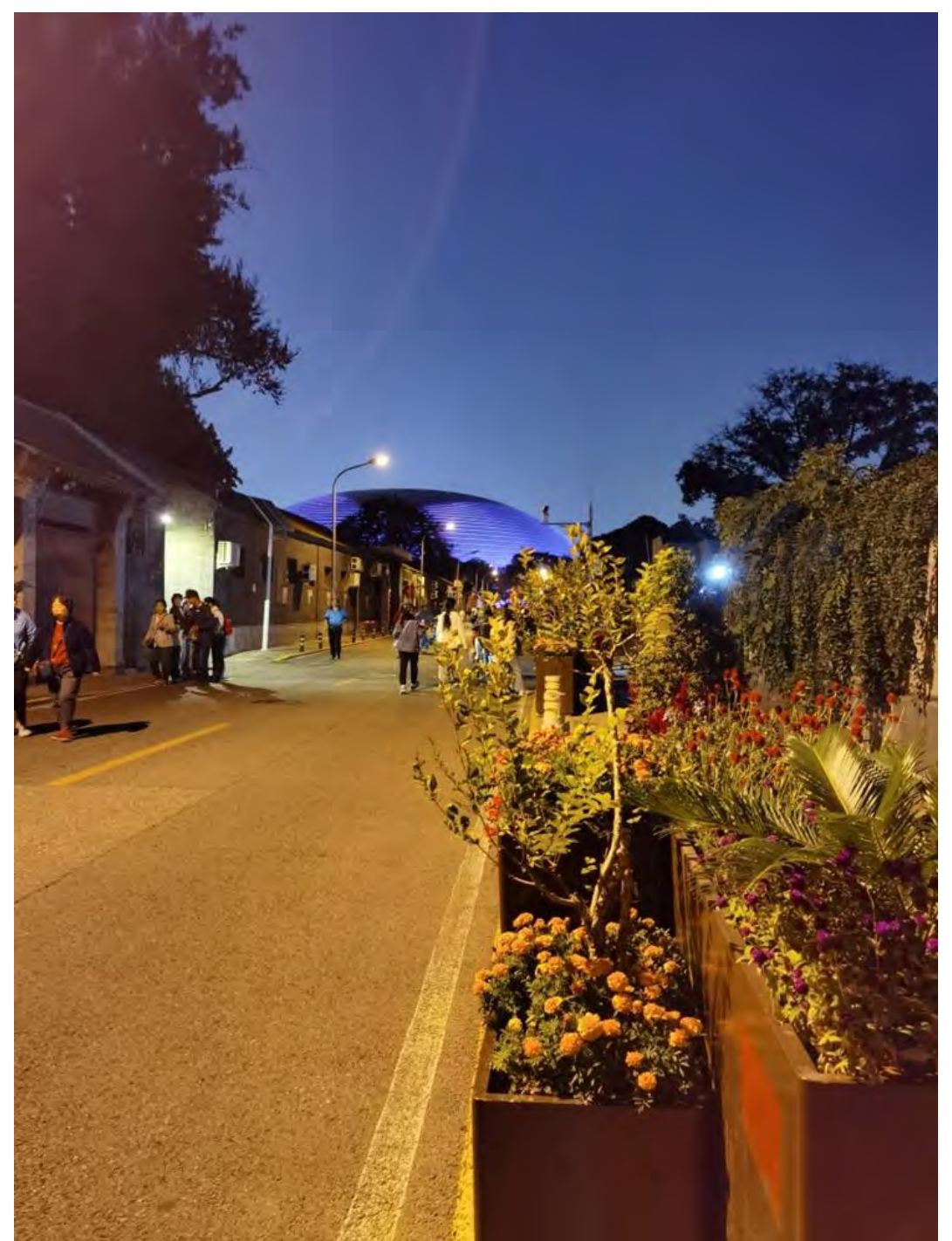
有无相生, 难易相成, 长短相较, 高下相倾, 音声相和, 前后相随。恒也。

天地不仁, 以万物为刍狗; 圣人不仁, 以百姓为刍狗。

道可道, 非常道。  
名可名, 非常名。

Reality and Possibilities: The Chinese government encourages eco-friendly practices and environmental improvement.

Thirdly, local governments in China are currently implementing the programme of 'Pocket Park', making use of wasteland, abandoned land and every nooks and corners to plant flowers and plants. Children's nature education has also opened up a wider space for FSP.



Reality and Possibilities: We are confronted with a future of increasingly frequent natural disasters.

- Fourthly, for the sustainable development, the UN issued a Report: ‘We are destroying nature at an unprecedented rate, threatening the survival of millions of species and our own future. But human can still turn things around to do so, for example, by promoting transformational change, it also says that where land is owned or managed by indigenous peoples and local communities, there has been less destruction and sometimes none at all. (UN Report, 2019) (photos from web)



# Difficulties and Challenges



- People forget where we come from, our relationship with nature, the land and everything.
- With the over rise of urbanization, ‘people no longer recognize the importance of cultivation, and even, consider it in a pitiful position because it is so common and extremely small.’ (Noël CULET, 1967)
- Because of their very poor status, they have been excluded outright by business circulation and economists as well as invisible in statistical data.

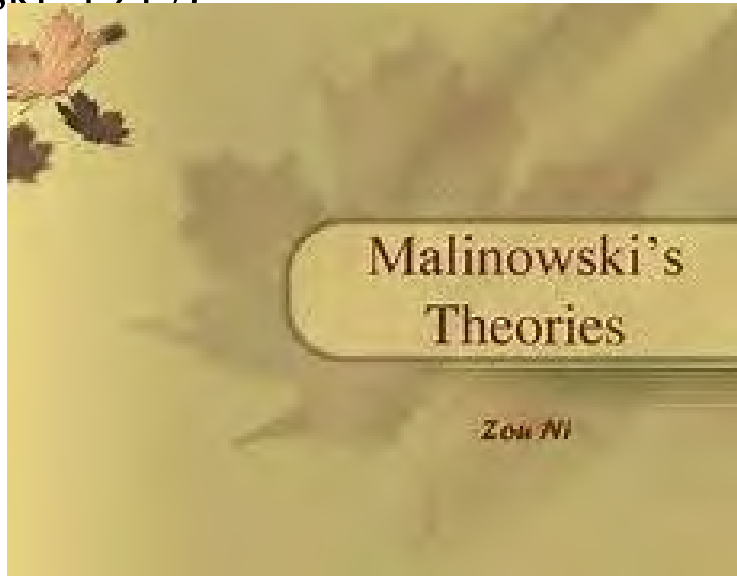
# Difficulties and Challenges

- The younger generation grows up in a consumer society, and they are the main body and addicts of urban online shopping. They have fallen into the trap of consumerism and become the "new poor" who "rice to their mouths and clothing to their hands", which implies new social contradictions and risks.
- As the older generation continues to leave, the tradition of family discipline is almost lost and will put an end, and have to the Chinese virtues historical of lifestyle of thrift, hard work and simplicity.



# Conclusion

- ‘Our modern civilization, at present, may be facing its ultimate destruction. We have paid attention only to the use of qualified specialists in mechanical engineering, but in the control of political, social and moral forces we Europeans are becoming more and more dependent on madmen, maniacs and outlaws.’ (Malinowski 1945)



- ‘Modernity’ is usually defined on the basis of anthroposophy ..... dividing humans from non-humans, heaven from earth ..... ‘Modernity’ refers to a new form of control, an acceleration, a fragmentation, and a revolution. Modernization meant cruelty and barbarism for pre-modern societies. ‘Modernity is a revolution in the past.’ (



# Conclusion

- I as a personally, understand that ‘MidWay’ and ‘Sufficiency’ which seem like a quantifier, but they are actually contain in philosophical and value proposition, with invited concepts of ‘taking the middle’, It can be interpreted as ‘taking the simple’, ‘moderate’, or ‘harmony’ in the moral and ethical context of Chinese culture. This is probably the main purport of this study, under the time of sustainable development.
- Being friendly to the environment, reducing waste, consuming moderately, going to nature and restoring humanity, those are the way out for our development.
- Photo from web



# Q & A

**Note: All photos without attribution were taken by Ma Huidi.**

# Thank You

Workshop on the Project of Sated Cities? Probing sufficiency in digitalization, land—  
use and consumption in China's urban

Nordic Centre Fudan University, 25th October 2024