

Yaxin Wang | 190164 | 35,575 Characters

FOOD AND POWER

The role of food governance in modern urbanization and the rebirth of the food sovereignty in Taiwan, China.



A breakdown of the fuel cost of a standard white loaf
Credit: Author Urbanism and Societal Change 10ECTS
Royal Danish Academy – Architecture, Design, Conservation Oct. 2020

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*The King he governs all,
The Parson pray for all,
The Lawer plead for all,*

fig.01 Agnes Denes, Wheatfield – A Confrontation in Downtown Manhattan, 1982, Credit: John McGrall

*The Ploughman pay for all,
And feed all.¹*

¹ Dyck(1992), Ian. *William Cobbett and Rural Popular Culture*.
Cambridge: Cambridge University Press,p.53.

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Introduction

1 In early human civilization, food was the representative of power. Cities were built around arable land and rivers because food was the fundamental factor in urban development. Food surplus appeared for the continuous improvement of productivity, and the first hierarchical system of human society also emerged at this moment. It is worth noting that food governance has not changed since ancient times.

The principal of urban development since industrialization has been transportation-oriented. Then, the agricultural mechanization resulted in food commoditization, and cities quickly replaced

villages, became dominant. In the capital market where opportunism prevails, food has inevitably become one of the tools for monopolists to make profits. In modern times, many countries around the world are still plagued by problems such as hunger, malnutrition and food safety, and food inequality. Many developing countries cannot meet food demands, thus giving opportunities for speculation in developed countries who want to control the world.

"Control oil and you control nations; control food and you control the people."

--Henry Kissinger
U.S. Secretary of State,

Theories and Methodologies

Urbanism is a term we have studied for years, but food is always ignored in this complex context. Compared with nature-based rural areas, industry-based cities are contradictory; however, food is good at bridging the gaps between them.

The theories I looked into first are the phrase 'Landscape urbanism,' offered by Peter Connolly in the mid-1990s, and

'Urban agriculture.' It didn't take so long to discover the limitations of these two concepts. I believe food is much more than just landscape or agriculture. I would like to use the theory 'Food Urbanism' to conduct my studies. Since all living things must eat – and must eat each other – food is a powerful force shaping our

1 Carolyn Steel (2021) *SITOPIA : how food can save the world.* VINTAGE

2 Darrell, Bruce(1970) *What is Food Urbanism?*, January 1 [accessed 05.10.2020] available at: <http://foodurbanism.blogspot.com/2007/01/what-is-food-urbanism.html>.

bodies, habits, homes, cities, landscapes, and climate.¹ By seeing food as the cornerstone of our convivial city, we could figure out how to develop the new urban planning quality.

This article intends to explore the status of food in modern society, first focusing on its role in globalized free trade. Study the influence between the food culture and the food system.

Zoom into the contradiction between China's rapid urban development and its food system. Then, analyze the farmland abuse problem in Taiwan through the lens of data and political policies. By focusing on the food system's current situation and the food culture in Taiwan, try to discuss what improvements can an architect made?

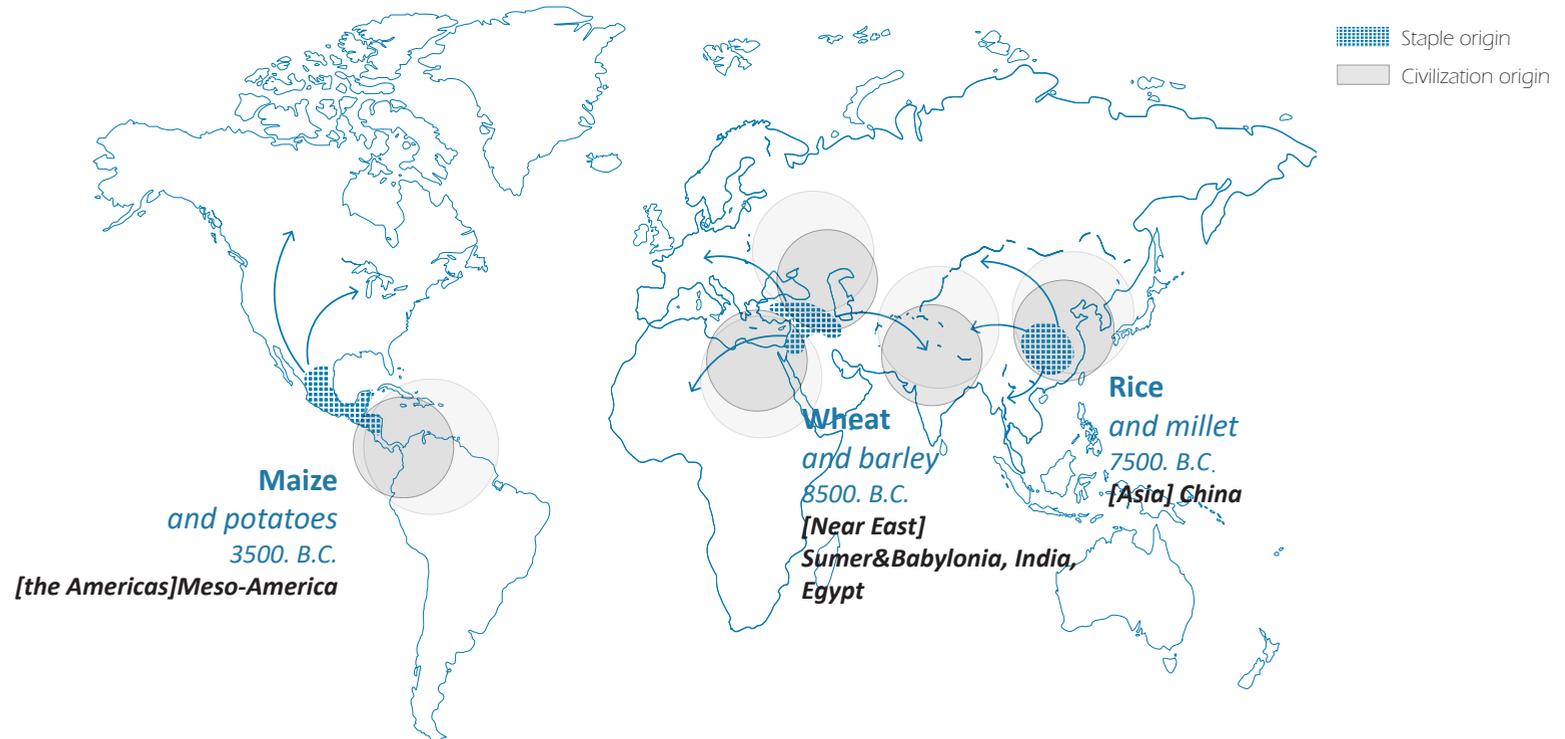
"I would also see Food Urbanism as a theory that positions food as a primary transforming force capable of organizing the city and enhancing the urban experience. "²

The hungry root of modernity

The staple thesis, created by Canadian economic historian Harold Innis and macroeconomist W.A Mackintosh in 1923, looks at how the natural staple products shaped an export-led city growth.³ They believed that the search for and exploitation of these staples led to the creation of institutions that defined the political culture of the nation and its regions.⁴

While staple also played a significant role in building the first human civilizations- Near East, Asia, and the Americas. Instead of hunter-gathering, domesticating plants and animals as a stable food supply generated the early small villages. A food system based on self-sufficient farming impacted on shaping a spontaneous cooperative social network.

Sharing and collaboration were the foundation of human civilization, while power and plunder followed as the shadow.



Food production became the powerful rulers of the early settlements. Together with the religious groups, Priest built the first power system because he claimed to be the one that was able to talk with the 'local god' and understand the regular pattern of climate change. Strictly ordered, social hierarchies emerged to perfect the small-farm system when people need larger-scale irrigation systems

fig.02 The centers of early human civilization and the origins for domesticated staple crops credit: author data source: Tom Standage(2009), An edible history of humanity, p.12

or public infrastructures; however, at the moment when there was enough food surplus, social classification gradually emerged. Food became the representative of wealth and power.

In modern days, factory farming made a massive increase in food production, strengthening, and emphasizing Food's power. When trading emerged, the linkage between capitalism and food power, food politics, and food war got more people to talk about.

3. Chen, James (2020). "Staple Thesis Definition." Investopedia. Investopedia, September 30 [accessed 02.10.2020] available at: <https://www.investopedia.com/terms/s/staple-thesis.asp>.

4. Wikipedia contributors (no date), "Staples thesis," Wikipedia, The Free Encyclopedia, [accessed 02.10.2020] available at: https://en.wikipedia.org/w/index.php?title=Staples_thesis&oldid=931286307

Free trade is not free

Free trade and bilateral agreements allow countries to negotiate privately to determine their taxation and import and export trade agreements that fit their own needs. That contributed to the establishment of the current globalization situation. Ideally, world-scale resource reorganization should be a win-win situation.

But do globalization and free-trade policy help those in need? Or become a means to plunder them?

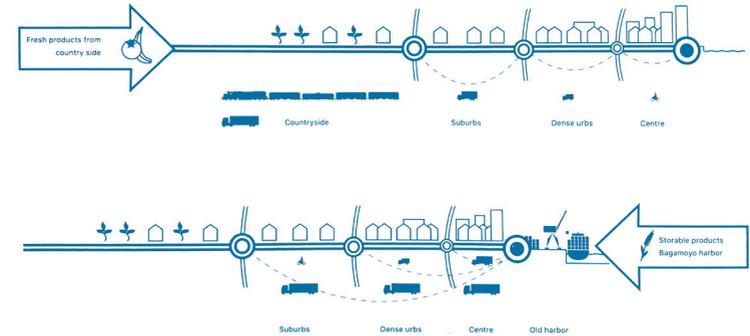
Examples of food embargo more usually happen in big agricultural production counties, especially the United States, which maximize this hypothetical food power.

The current world food crisis originated from the WTO's market-oriented food policy. They advocated that the regulation of the



fig.03 Near the Phnom Tnout Phnom Pok Wildlife Sanctuary, in northern Cambodia, land is burned by farmers, loggers, and locals looking to either capture wildlife or clear land for agriculture. Cambodia has one of the world's fastest rates of deforestation, helped by drought. Credit: Sean Gallagher

fig.04 Different modes for transporting fresh produce and storable products into the city. credit: Jerryt Krombeen data source: Johannes Simon Cornelis Wiskerke; Saline Verhoeven (2018). Flourishing Foodscapes: Designing City-region Food Systems. Valiz. p.128



market can naturally provide worldwide dynamic balance upon food supplies. In this way, multinationals' dominant trade system canceled the world's grain reserves and led to soaring food prices, uneven distribution, agricultural land grab, etc. Such forms also include the rise of mega-corporations and speculative finance capital, which serve simultaneously as mechanisms of accumulation, and structures to smother resistance. Both the corporate and finance-capital aspects of imperialism are exemplified in the food system, a system which, therefore, cannot be changed without challenging them.⁵

5. Robert Biel (2016).
Sustainable Food Systems:
The Role of the City. pp. 75

A high degree of industrialization has led to a surplus of labor, and satellites could monitor weather changes. The speculative monopolies immediately put their efforts into getting more possession of limited farmland. The most obvious examples to show the invasion of the mega-farms are Cambodia and Uganda.

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fig.05 A rubber plantation in the Beng Per Wildlife Sanctuary, in northern Cambodia. Most of the sanctuary's land has been sold by the government. Credit: Sean Gallagher



The trade liberalization treats limited natural resources, lands, as one of the most important assets. As agriculture is commercializing, farmlands became a commodity with the highest added values in the commercial market. Much evidence shows that agricultural commercialization can make local land relations more monetized and individualized.⁶

In Cambodia, the Economic Land Concession issued in 2001 allows the land to be owned and used for a maximum

**Cambodia, 2013,
Foreign-owned
Farmlands**

40%

of 99 years and can be expanded (up to 10,000 hectares) for industrialized agricultural development purposes. The 'Everything But Arms' initiative made by the European Union gives free duties and quotas when importing from least developed countries into the EU, armaments not included. The policy is so preferential that large quantities of Cambodian sugars are exported to European countries.⁷ Many large farms in Cambodia started large-scale sugar production and then exported to Europe through EBA. According to statistic research in Cambodia, in 2013, 40% of farmlands were owned by foreign companies. To planting more sugar canes, thousands of rural people were forced to give their farmlands away and became homeless. This market-based trade system caused systematic concerns worldwide linked to equality and human rights issues. In August 2020, the EU

6 *The International Institute of Environment and Development (2013) Tackling the trade law dimension of land grabbing, November 14 [accessed 02.10.2020] available at: <https://www.iied.org/tackling-trade-law-dimension-land-grabbing>*

7–8. *European Commission (2020) Cambodia loses duty-free access to the EU market over human rights concerns August 12 [accessed 05.10.2020] available at: https://ec.europa.eu/commission/presscorner/detail/en/ip_20_1469*

8

fig.06 Cleared forests in Preah Vihear Province, in northern Cambodia near the border with Laos. The South East Asian country has one of the fastest rates of deforestation in the world; it's estimated that only 3 percent of primary forest remains.

Credit: Sean Gallagher



decided to prohibit some of Cambodia's export products.⁸

Uganda is the largest producer of granular brown sugar in the East African Community.⁹ But the story behind this fact is not sweet.

Agilis Partners, Kiryandongo Sugar Limited, and Great Season SMC Limited are three international driving forces behind the violent looting of land resources and the chaotic displacement of people in Kiryandongo district, Uganda.¹⁰ The government also acts as a facilitator in this violently expelling indigenous people. In April 2017, Agilis Partners bought farmland under cultivation from the Ugandan government without notifying local farmers. Seven months later, about 30 local police

officers and 20 local gangs with pangas suddenly invaded the village by force to grab the land and violently evicting the residents away.¹¹

Except for residents to make way for economic development, the same goes for forests. The land leasing policy usually gives sugar entrepreneurs 99 years of use rights, which becomes an unforgivable shame for all people of common sense. Enterprises cut down or burn forests to provide land to sugar cane production. Uganda's forest coverage rate has decreased by 62.5% between 1990 and 2015. (From 24%-9%)

9. Wikipedia contributors, "Sugar production in Uganda," *Wikipedia, The Free Encyclopedia*, [accessed 01.10.2020] available at: https://en.wikipedia.org/w/index.php?title=Sugar_production_in_Uganda&oldid=954467142

10–11. GRAIN (2020) *Land grabs at gunpoint: Thousands of families are being violently evicted from their farms to make way for foreign-owned plantations in Kiryandongo, Uganda, August 25* [accessed 02.10.2020] available at: <https://grain.org/e/6518>

fig.07 Uganda Violent land grabs. Police officials at the eviction. Credit: GRAIN

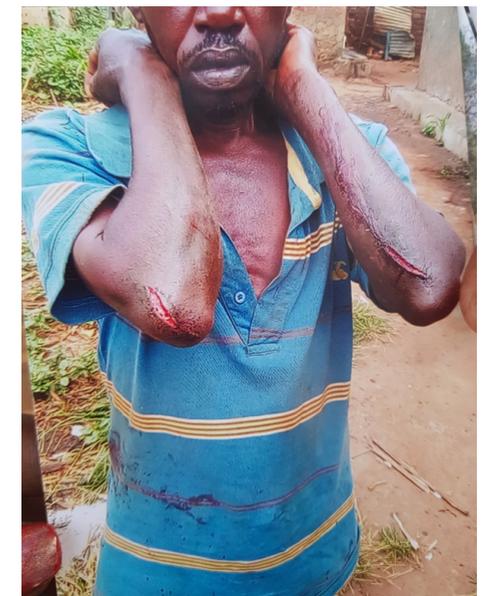


fig.08
A community member who was beaten and hacked with a panga during the eviction.
Credit: community member archives

The food war: secret weapon

11 Modern agribusiness isn't just about producing Food, it is about maximizing the profit to be made from it.¹² According to statistics from the Food and Agriculture Organization (FAO), food prices rose by 75% from 2005 to 2008 worldwide; in 2007 alone, global food prices increased by nearly 50%. After the 1970s, another round of food crisis broke out. Civil commotion and even riots broke out in about 40 countries. The four major grain companies, known as the agro ABCD, controls 80% of the global Food trade.

And the power is continuing centralizing. The geopolitical scientist Frederick William Engdahl wrote a book to claims that the wealthy Rockefeller family is planning to take control of the global agriculture and food supply through the Green Revolution and the promotion of genetically modified organisms which would lead to the elimination of independent farms.¹³

The seed, Terminator, made by Monsanto Company, monopolizes 90% of the global seed market in the United States. Taking advantage of Argentina in its debt crisis, Monsanto (American company) sold a massive amount of experimental Terminator soybean seeds to Argentina to plant combined with its herbicide, Roundup. The Terminator will sterilize seeds while the herbicide will drift with the wind and kill all other plants, including ordinary soybeans. Until 2004, Argentina had 48% of farmland (about 14 million hectares) growing only genetically modified soybeans from Monsanto, becoming the world's third-largest soybean planting country. Argentina, which used to be a self-sufficient country, has reduced its dairy farms by 50% due to the destruction of its monoculture ecosystem and even changed its eating habits wholly. Thousands of farmers became homeless, deforestation, polluted water sources, and social unrest has worsened public order.

**"Food is a weapon.
It is now one of the
principal tools in our
negotiating kit."**

-- Earl Butz
U.S Secretary of Agriculture

12. Carolyn Steel (2008). *Hungry City: How Food Shapes Our Lives*. Chatto & Windus.

13. Wikipedia contributors, "Seeds of Destruction (book)," *Wikipedia, The Free Encyclopedia*, [accessed 02.10.2020] available at: [https://en.wikipedia.org/w/index.php?title=Seeds_of_Destruction_\(book\)&oldid=931963051](https://en.wikipedia.org/w/index.php?title=Seeds_of_Destruction_(book)&oldid=931963051)

Thus, Argentina became the first country defeated in a food war.

The conspiracy theories behind genetically modified foods are still under discussion. Still, there is no doubt that under the dumping of American agricultural products, agriculture in developing countries has been devastated.



A reduction in the weed growth caused by Seed Terminator
fig.09 left:Harvested with a Seed Terminator Credit: Josh Lade
fig.10 right:Harvested without Seed Terminator Credit: Josh Lade

Urbanization and a big gap in China

13 China now is feeding 22% of the world's population, with 7% of the agricultural lands. After 1949, agricultural income once accounted for 40% of fiscal revenue. The entire construction was inseparable from Food; however, with the rapid rise of Chinese economic development nowadays, the contradiction between urban and rural areas caused by the limited land resources increases.

During the whole urban development process, urban and rural was always opposite or even antagonistic. The revolutionary slogan of the Communist Party of China, represented by Mao Zedong, during the civil war, was "The Rural encircle the urban and the armed seize power." After the founding of the People's Republic of China, all policies emphasized industrial development rather than farming. So, the price scissors appeared between industrial and agricultural products. Coupled with the dual urban-rural structure's orientation, this has led to a growing gap between urban and rural areas. In recent years, the new



fig.11 The Shenzhen River separates the high-rises of Shenzhen, China, from farmland in Hong Kong. China has come under criticism for the amount of agricultural land it has paved over in its push for economic development. Credit: Brent Lewin Edit: Author

fig.12 Building in the city of Hefei next to surrounding fields – as China's urbanisation continues at breakneck speed, will its agrarian resources be hit? Credit: AFP/Getty Images Edit: Author



rural policy suggested that the industry supports agriculture, and the city feeds back the countryside. The urban and rural areas seem to be incompatible with each other all the time. The linkages between rural and urban areas, people and enterprises have become more intensive, both across space and across sectors — agriculture, industry and services — with important implications for food systems.¹⁴

How to feed 1.4 billion Chinese people? Reducing small-scale farming and increasing large-scale industrial production may be one of the solutions. Still, at the same time, it also makes the separation between the food and the city more significant. In this way, it is not difficult to understand why food safety and environmental issues were also raised in China.

14. International Fund for Agricultural Development (2017) *Why Small Towns Matter: Urbanisation, Rural Transformations and Food Security* [accessed 05.10.2020] available at: <http://pubs.iied.org/10815IIED>.

Diamond or Taiwan Farmland?

Domestic 15



fig.13
Protest against the Thai food company CP Group halting plans to build six poultry farms in Hualien County. Credit: CNA photo

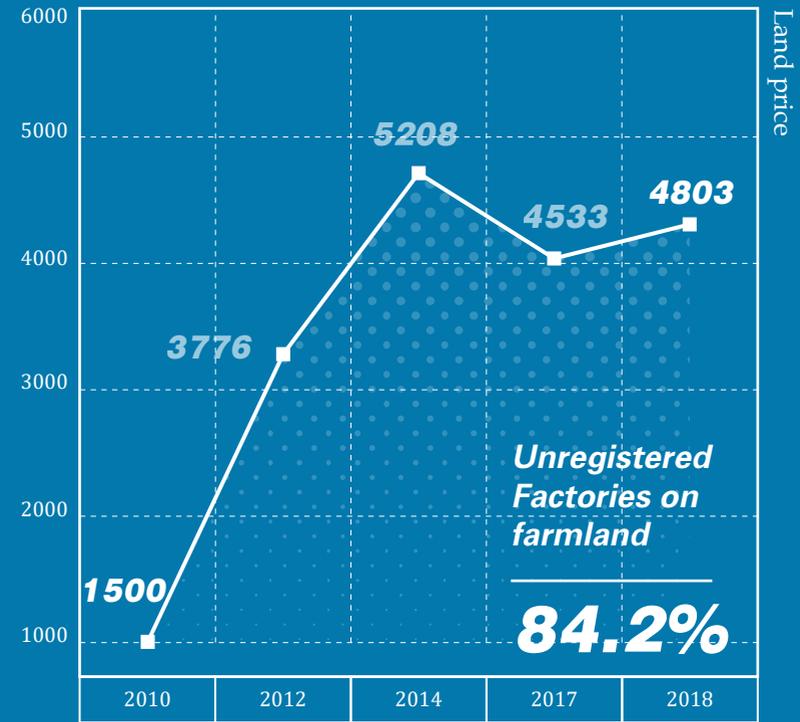
Taiwan has a large area of mountainous land, with few arable land. Research by the Academia Sinica in Taiwan shows that Taiwan has lost 46,020 ha farmland in the past ten years. Simultaneously, the farmland has turned into a diamond-price; between 2010 and 2018, it increased by 220%.

"Those who sell land are selling their hometown, and those who buy land are buying dreams!"¹⁵

The "Agricultural Law Regulations" opened up agricultural land's free trading since 2000. Now, farmland has become an essential part of the real estate market. Looking back at the rising trend of agricultural land in various parts of Taiwan, the researcher, Lin Ziqin pointed out that the northern, central, southern, and eastern regions have four different significant causes: government development, farmland factories, plant power, and farmhouses.¹⁶

15-16. Apple Daily (2019) *The golden wasteland 2.0: Diamond-price farmlands* 台灣蘋果日報 - 荒地金磚 2.0: 鋤不動的鑽石田 March 10 [accessed 02.10.2020] available at: <https://tw.inv.appledaily.com/farmland/>

Farmland price in Taiwan (10000NT\$/hectare)



Domestic 16

Farmland Average price comparison, 2016



fig.14 Credit: Author Data source: The data of 2010 are disclosed by former staff of Council of Agriculture, Peng Zuokui, and the data of 2012-2018 are public data from open data resource of Taiwan government.

fig.15 Credit: Author Data source: Apple Daily sorted according to website data.

Proportion of farmers renting land

17

Domestic

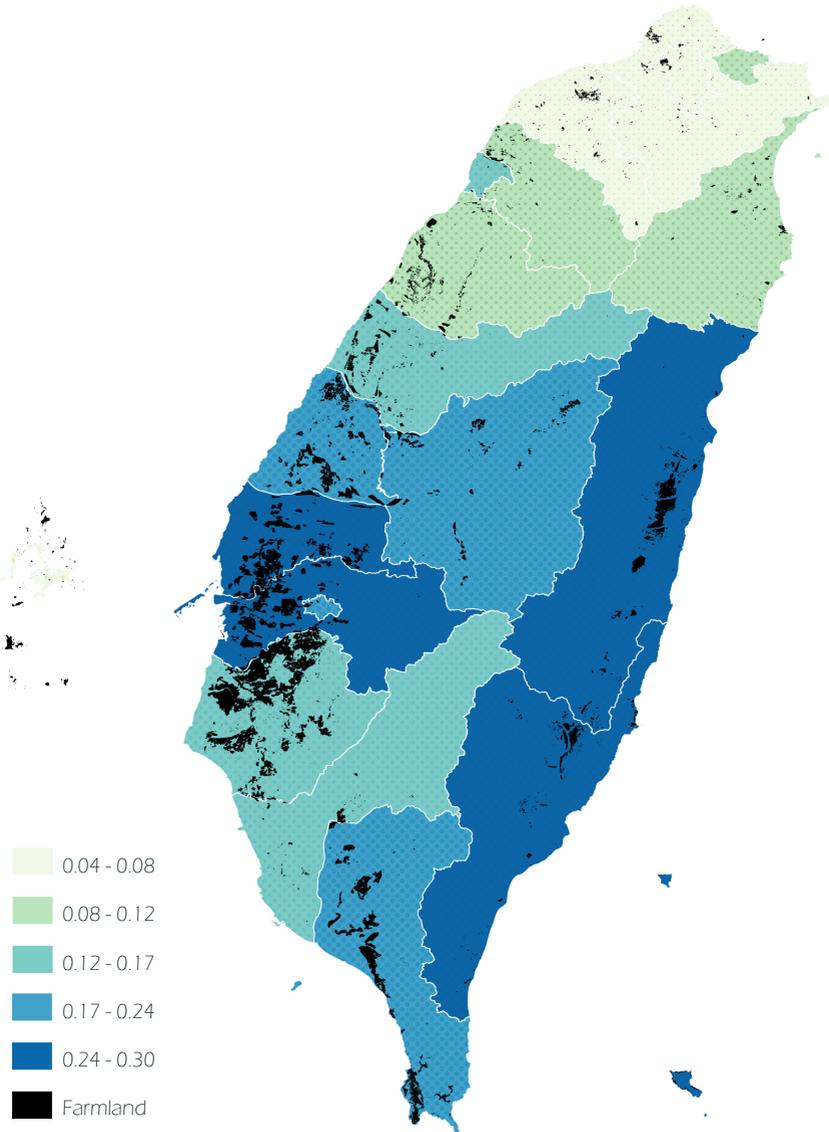


fig.16 Credit: Author Data source: Taiwan council of agriculture, executive yuan

Distribution of Taiwan's innovative agricultural industries

18

Domestic

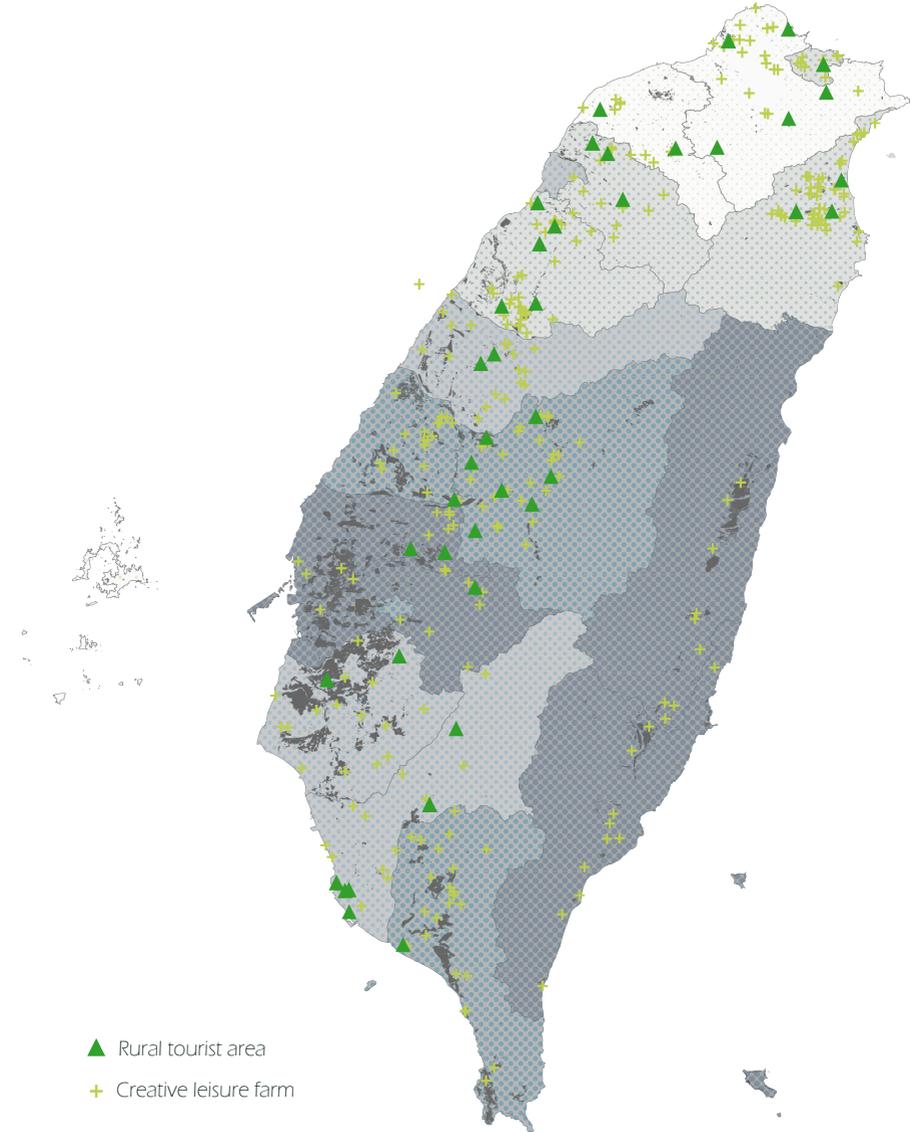


fig.17 Credit: Author Data source: Taiwan council of agriculture, executive yuan

Who is feeding Taiwan

19

Domestic

Taiwan, 2018
rate of Food
Self-Sufficiency

34.6%

In 2018, the food self-sufficiency rate in Taiwan, calculated by calories, was 34.6%. As Taiwan's largest importer of agricultural products, the United States accounts for 25.9% of the annual food import. Since Taiwan encountered a severe food crisis in 2008, the food crisis was brought up again when the Covid-19 epidemic caused the United States to restrict food exports.

After the global food crisis in the 1970s, the United States established a U.S.-centric global food system.¹⁷ Under the dumping of American agricultural products, the agriculture of developing countries has suffered devastating blows. Food globalization does more harm than good, and the danger is evident.

The chairman of the Council of Agriculture, Chen Jizhong concluded that imported products' demand remains high. The high production cost of agricultural products in Taiwan is another vital reason. When consumers always consider the price' as their priority, the import rate is hard to come down."

He believes that only when consumers start to trust their local food, their dependence on imports will reduce and stimulate local agriculture development.¹⁸

17. Jennifer Clapp & Eric Helleiner (2010): *Troubled futures? The global food crisis and the politics of agricultural derivatives regulation*, November 05 [accessed Oct 05 2020] available at: <https://doi.org/10.1080/09692290.2010.514528>

18. Sina News(2020), *Why is it difficult to increase Taiwan's food self-sufficiency rate to 40%?* Chen Jizhong: *Consumers need to help, Taiwan's food self-sufficiency rate is why it is difficult to increase to 40%?* 陳吉仲：消費者要幫忙，單靠生產端力量有限, July 20 [accessed 02.10.2020] available at: <https://news.sina.com.tw/article/20200720/35809532.html>

fig.18 An expensive mansion right in the middle of farmland- 430m2 Credit: Apple Daily



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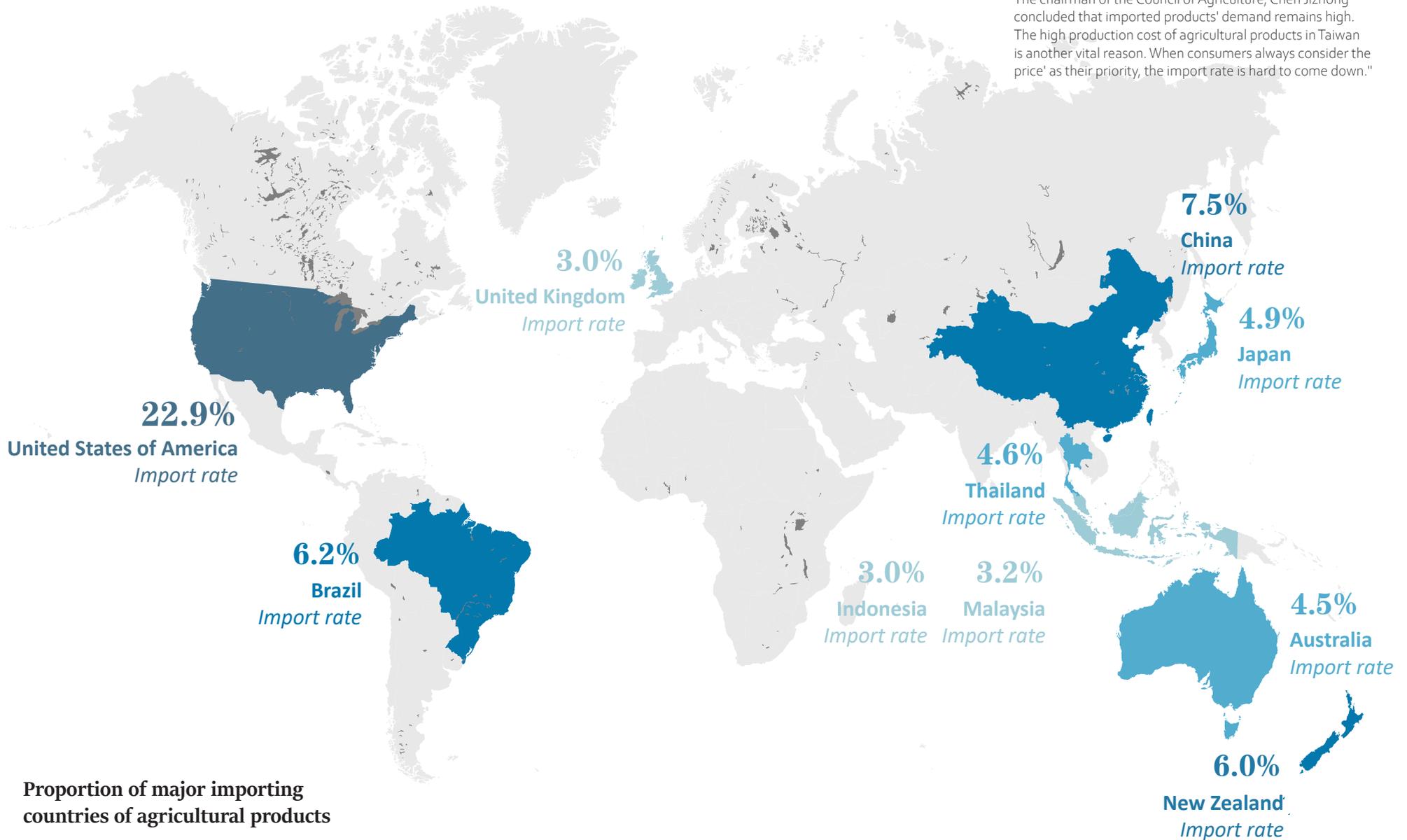
Domestic



fig.19 Factories who brought the farmland and claimed to build a solar panel greenhouse Credit: Apple Daily

fig.20 But it is empty inside Credit: Apple Daily



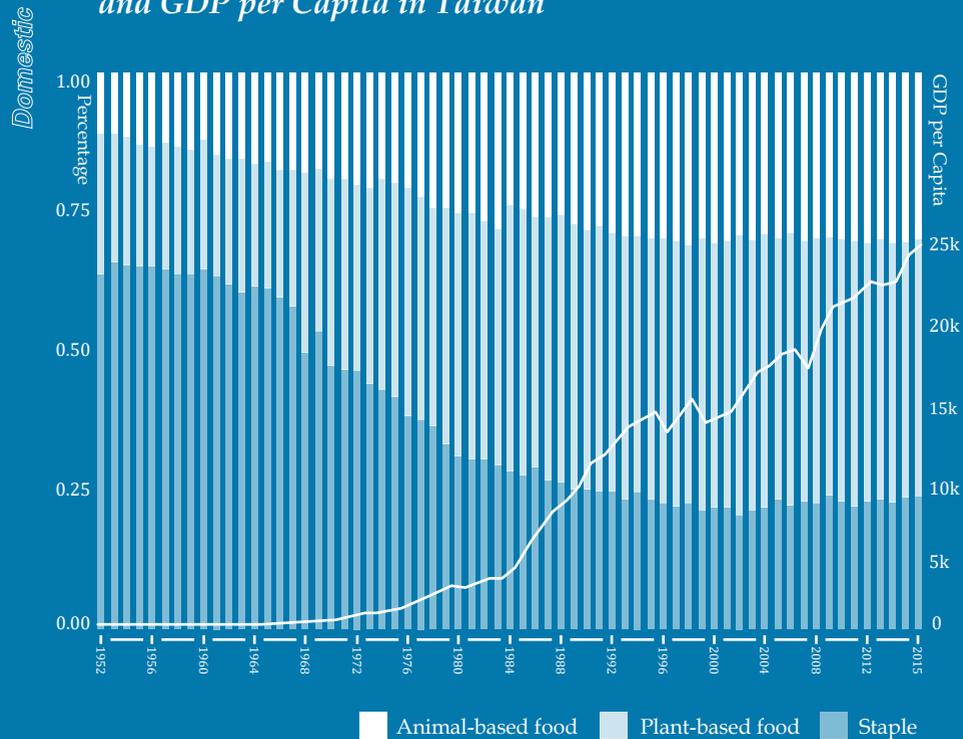


65.4% food depends on imports in Taiwan

The chairman of the Council of Agriculture, Chen Jizhong concluded that imported products' demand remains high. The high production cost of agricultural products in Taiwan is another vital reason. When consumers always consider the price' as their priority, the import rate is hard to come down."

fig.21 Taiwan food import Credit: Author Data source: Taiwan Council of Agriculture, Executive Yuan

Changes in the proportion of food consumption and GDP per Capita in Taiwan



Annual consumption of animal-based food breakdown (Unit: kg/person)

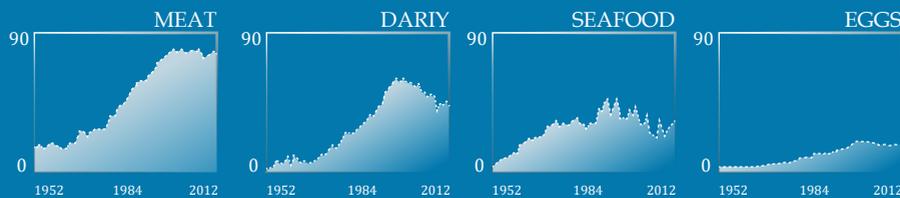


Fig.23-23 Credit: Author. Data source: Taiwan Council of Agriculture, Executive Yuan and Directorate-General of Budget, Accounting and Statistics, Executive Yuan

Taiwan local food structure

As one of the "Four Asian Tigers," Taiwan experienced rapid economic development since the 1960s. In 1976, the GDP per capita exceeded 1,000 dollars. Revolutionary urbanization became a catalyst for food consumption and dietary structure. At the beginning of the 21st century, food consumption has been relatively stable in Taiwan.

The traditional Eastern diet is based on plant foods, mainly staple foods. The transformation of conventional food consumption structure is inseparable from its economic development and the political policies. The composition of food structure can be simply divided into two categories: plant-base and animal-base. From 1961 to 2015, Taiwan's per capita GDP showed a linear increase, from 153 to 19,400 US dollars. Plant foods account for a high proportion of total food consumption, but they appeared a downward trend year by year, from 86% to 65%. The staple food that once accounted for the highest proportion has fallen significantly from 55% to 17%. The ratio of animal food consumption has shown an overall upward trend, from 14% to 35%. But it is worth noting that, since 1992, no matter how the economic growth rate changes, the proportion of these three types of food structure has stabilized. If we zoom in the animal foods—meat, dairy products, eggs, and aquatic products have all started to stabilize or decline around 1992. This trend showed that the consumption of animal food and economic development are in a normal distribution. Different foods have different time to reach their peak and stable amount. When the national economy comes to prosperity, animal food consumption shows a downward trend with economic growth.

Overall, Taiwan's total food consumption structure is stable now, and the transformation process is gradually transitioning from only plant-based to plant-based and animal-based.¹⁹

19. Li Liu, Yifu Zhao(2016), *World Agriculture A Comparative Analysis of the Changes of Residents' Food Consumption in Mainland China and Taiwan* 大陆和台湾地区居民食物消费变迁的比较分析, *In World Agriculture* 世界农业, May 16 2016, p155-162

Taiwan food history

25 In addition to the impact of economic development on the food system, the political-economy analyses will reveal the structural operations behind the Taiwan food system. There were three virtual times in the evolution of Taiwan's food culture: Japanese Taiwan time(1895-1945), Kuomintang-led Taiwan time(1949-1987), and now.

From the Japanese invasion in 1895 to the victory of the Second World War in 1945, Taiwan experienced a 50-year colonial time. In 1898. After Japanese Kodama Gentaro became the Governor-General of Taiwan, he put effort into agricultural development, hoping to change Taiwan into Japan's rural product supply center. At first, the general policy was to develop the sugar industry. Later, due to Japan's food shortage, the schedule put developing rice cultivation as the highest priority. At that time, the leading staple food in Taiwan was rice planted by early immigrants from Fujian,

China. Since the taste was different from the Japanese favorite japonica rice, farmers gradually switched to growing improved rice varieties to meet the needs of the Japanese market. By 1944, 66.7% of the total rice planting area was the improved varieties imported from Japan. The seasoning Taiwanese used every day, monosodium glutamate, was first extracted from kelp by Japanese chemist Kikunae Ikeda and quickly became popular in Taiwan. Eat-out culture has also become popular with the rise of the wealthy class, and the number of restaurants has proliferated, especially Japanese cuisine. Due to the Meiji Renovation Movement in Japan, Taipei restaurants were mainly Japanese cuisine and many Western restaurants during the Japanese Taiwan period.²⁰

After the Chiang Kai-shek government's defeat in the civil war between the Kuomintang and the Communist Party, a considerable number of soldiers and civilians

retreated to Taiwan, resulting in a shortage of food on the island. The government only prohibits people from eating out and holding banquets by frugality. The government and the United States signed the "China Aid Act of 1948," an agreement that the American government would assist Taiwan with military surplus and agricultural products. One of the most influential items was the delivery of flour from the United States to Taiwan, which was later replaced by only importing wheat from the United States to support Taiwan's flour factories. At that time, rice made in Taiwan

20. Siyang Zheng(2015), *The Study of Food Cultural Change in Taiwan Since 1900* 二十世纪以来台湾地区饮食文化变迁述析——以台北市为中心, [accessed 14.10.2020] available at: <http://gb.oversea.cnki.net/KCMS/detail/detailall.aspx?filename=1016026862.nh&dbcode=CMFD&dbname=CMFDTEMP>

was three times expensive in the global market than wheat(raw material of flour). The government found that importing low-priced wheat and exporting self-produced rice at a high price was lucrative, and began promoting pasta policy. In the 1950s and 1960s, flour consumption increased by 16.7% in five years with Taiwan and the American government's cooperation. Noodles, bread, and mantou(steamed buns) have replaced traditional rice-based staple habits. Chiang Kai-shek, who was the leader at the time, came from Zhejiang, China. Most private chefs who came with military politicians and wealthy merchants came from Hunan and Zhejiang.

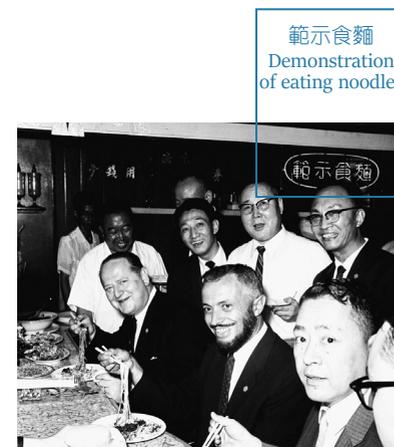
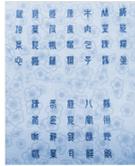


fig.24 Taiwan government publicly promotes eating noodles. Credit: National Archives Administration National Development Council

EXTRAVAGANT-international cuisine



Chiang Kai-shek (1948-1975) Chiang Ching-kuo(1978-1988)

1. Divided into Chinese and West dishes
2. Chinese cuisine is Zhejiang cuisine
3. Experienced war, staple food is the more than enough
4. Try to be international



Li Denghui(1988-2000)

1. Taiwan's economic take-off stage
2. Expensive food such as shark fin and abalone are popular

local cuisine-SIMPLE

Chen Shuibian(2000-2008)

1. More simple and casual
2. Focus on tablewares and design
3. Dinner served to guests as they arrive
4. Firstly put street food on the list
5. None extravagant food such as shark fin and abalone



Ma Yingjiu (2008-2016)

1. Environmental-friendly
2. Energy-saving, counting Food Mileage
3. Food and drinks must be made in Taiwan



Tsai Ing-wen (2016-2024)

1. Minimalist menu design
2. The 2020 National Day Banquet was held in the way of Taiwan night market
3. Food and drinks must be made in Taiwan
4. The origin of each dish will be listed on the menu



fig.25 Taiwan State banquet menu for each presidents
Credit: ReadingTimes 時報出版 Edit: author

The food culture in the upper class has changed from mainly Japanese cuisine to representative Zhejiang cuisine and other Chinese dishes.²¹

With people's democratic thinking, the Martial law, which lasting 38 years, was finally abolished in 1987. The changes in the political environment made economic policies more liberal, international, and institutional. The rise in people's income levels directly led to the prosperity of the catering industry. International restaurants have become popular in Taiwan, among which Japanese cuisine and mainland Chinese cuisine still account for the largest share. The street food vendors near the temple gradually developed into a night market business district.²²

In 2008, research from Taiwan Executive Yuan showed 4.1% of total GDP is night market vendors, of which food stalls accounted for 80% of the whole and

22.6% of the national food consumption. Nowadays, politicians will appear in the night markets during elections to show himself/herself close to the people to collect votes. In addition to political and economic factors, geographical location also played an essential role. Before 1951, the Land-to-the-Tiller Program was introduced, Taiwanese farmers had heavy work pressure due to the high land lease fees. At that time, Taiwanese farmers did not have time to eat lunch at noon, so breakfast was as important as dinner. Breakfast represents a classic expression of different food cultures, which also depends on the main agricultural products in that area. For example, people in Tainan eat beef soup because they have the largest slaughterhouse in Taiwan.

21-22. Siyang Zheng(2015), *The Study of Food Cultural Change in Taiwan Since 1900* 二十世纪以来台湾地区饮食文化变迁述析——以台北市为中心, [accessed 14.10.2020] available at: <http://gb.oversea.cnki.net/KCMS/detail/detailall.aspx?filename=1016026862.nh&dbcode=CMFD&dbname=CMFDTEMP>

Transition towns Totnes

A British town named Totnes has joined the Transition Towns (TT) movement, a community refused to be a part of globalization and market mechanisms. Totnes promotes bottom-up, community-based social structures to tackle local food production, health, energy, housing, arts, economy, etc. Totnes was not built in a day and once started street by street.

To fully understand how such community-level sustainable practices work, we could use Stokols et al.'s notions of "moral capital," "human capital," and "social capital."

Moral capital is the basis of collective Totnes. To strengthen a shared vision neighborhood, meetings will happen six times per month with handbooks and free newspapers.

23. D. Stokols, R. P. Lejano, and J. Hipp, "Enhancing the Resilience of Human-Environment Systems: a Social Ecological Perspective," *Ecol. Soc.*, vol. 18, no. 1, p. art7, 2013.

Moral capital denotes "investment of personal and collective resources toward justice/virtue."

Human capital refers to the "capacities of persons, including skills and information."

Social capital is "relationships among people that facilitate action." ²³

fig.26 Totnes pounds notes Credit: Totnes Wordpress blog



The value of social capital is fully demonstrated in the Gardenshare project, which was aimed at those who have backyard share it with those without gardens.

Skillshares were the best example of the human capital, free sessions offered as "a gift to increase the community's resilience" ²⁴.

Through such a resilient cooperation system, Totnes can control the invasion of market-oriented capital by making full use of the community's internal potential. In 2012, they declared war on the global food giant when Costa Coffee wanted to open a café in the town. The 'No To Costa' campaign was to fight for fair trade. Instead of the big coffee giant, they held farmer markets and promoted their local independent café and restaurants. Protecting the local food business is always the first priority.

Just like Rob Hopkins, one of the founders of the Transition Town, argues, "If we wait for governments, it'll be too little, too late. If we act as individuals, it'll be too little. But if we act as communities, it might be just enough, just in time" ²⁵.

24. Gui, Xinning & Nardi, Bonnie. (2015). *Sustainability Begins in the Street: A Story of Transition Town Totnes*.

25. R. Hopkins, *The Power of Just Doing Stuff: How Local Action Can Change the World*. Cambridge: Green Books, 2013.

Taiwan food forest

In 2015, the Wutong Foundation in Taiwan designed two urban food forest projects in both the city center and the high-speed railway station neighborhood area of Hsinchu City. With the support of the government, local schools and citizens were involved in the whole process.²⁷

Unlike the monocultures of modern agriculture, food forests learn from the multi-layered ecosystems of natural woods, providing new solutions to the current food production system. Food urbanism advocates organic food production. Agricultural products become citizens' food, and the fertilizer comes from citizens' biological waste. A closed ecological loop will reduce

Forest Gardening: A seven-year, low-maintenance, sustainable, plant-based food production, and agroforestry system.²⁸

Permaculture: By carefully-picked planting species and well-designed planting sequences, permaculture can repair damaged soil and ensure fresh food production throughout the whole year.

27. *Wutong Foundation* (No date) *Food forest* 食物森林, [accessed 05.10.2020] available at: <https://wutong.org.tw/program/ff/#2>

28. *Wikipedia contributors*(2020) *Forest gardening*. In *Wikipedia, The Free Encyclopedia*. [accessed 14.10.2020] available at: https://en.wikipedia.org/w/index.php?title=Forest_gardening&oldid=981135702



fig.38 Taiwan food forest in Hsinchu City
Credit: Wutong Foundation

the pressure of food waste and optimize urban resource circulation. As a representative of the local food system, the project plays a vital role in education, holding several activities related to the food system.

The application of the edible landscape made fair use of urban public space and transformed it into a diversified, symbiotic, and sustainable ecosystem. The gradual transformation of physical space will lead to the enrichment of urban public spaces.



fig.39 Taiwan food forest in Zhubei City
Credit: Wutong Foundation

Informal Taiwan

35 Taiwan is a place where its social and cultural background is constantly changing due to its inherent geographical characteristics; an island experienced war and colonization. A turbulent social environment will breed a strong sense of crisis. Informal urbanism has become Taiwan's urban reality and identity, and to a certain degree, reflects the dynamics and the psyche of its immigrant society.²⁹

Under the market-based economic system, even geographic development catalyzed Taiwan's informal urbanization and civic activities. For example, privately building and illegal houses renovation and night

market vendors. Those bottom-up organizational changes, according to Wright (2005), "are at once ephemeral and extensive, irrelevant yet critical, glaringly visible yet seldom observed."³⁰

The controversial South Airport Apartment was built in 1964 and has attracted much attention. It is the first apartment in Taiwan with a flush toilet and a separate kitchen, known as the most advanced and modern collective residential architecture. Today, it has become the messiest "birdcage house" in Taipei. The smallest one is less than three square meters. The illegal and private renovations have



fig.40(left) Taipei South Airport Apartment, November 29, 1964. The President of the Executive Yuan Yan Jiagan cut the ribbon for the completion. Credit: the Chief's Office



fig.41(right) Taipei South Airport Apartment, November 03, 2016. Credit: @a-hai,VSCO

29–30. KANG, Min Jay(2009), *INFORMAL URBANISM FROM INSIDE–OUT–INTERNALIZING TAIPEI EXPERIENCES OF INFORMALITY*, In *The 4th International Conference of the International Forum on Urbanism (IFoU)*, [accessed 14.10.2020] available at: http://www.ifou.org/conferences/2009delft/proceedings/3%20The%20Urbanized%20Society/full%20papers/B009_KANG_Min%20Jay_Informal%20Urbanism%20from%20Inside%20Out.pdf

entirely blocked the original building's façades. Residents here deprive each other's public spaces, corridors, the inner courtyard, and rooftops. In such a high-density, high-tolerance residential community, most households consist of low-income groups such as immigrants and agricultural immigrants. However, unlike Jiulongzhai, where Hong Kong criminals gathered, Taiwan's South Airport Apartments are more organic. The South Airport Night Market in the southwest corner of the city and catalyzed the characteristic area were mixed the night-market retail and the densely residential buildings.

fig.42 Taipei South Airport night market under the apartments,2013 Credit: Zizheng Liu



In the 1970s, Taiwan faced with rapid urbanization and large-scale agricultural industrialization. The birth of informal cities was more like a declaration of the urban fringe people's desire to survive. It was a declaration of war against dictatorship, but very fierce, chaotic, contradictory, and vulnerable. This unconscious and spontaneous urban wonder reveal a real problem of urbanization, gentrification. Operating and maintaining by the low-level civilians, its flexibility creates the diversity and even the wild artistic sense. The limitations of those chaotic systems are also evident. Should informal cities be formalized, and how should they be formalized?

Informal night market

37 Taiwan's night market culture fully embodies how spontaneous and food-centric informal urban culture has gradually become mainstream. According to the "Survey Report on Tourists' Consumption and Trends in Taiwan" by Taiwan's "Tourism Bureau" in 2006, 54% of foreign tourists visiting Taiwan mainly aim to taste the food.

The most primitive street market prototype was formed in the Tang Dynasty(618-907) in mainland China. According to the "Taiwan Nichi nichi Shin Po(first Chinese newspaper in Taiwan)" data, as early as 1908, there is a night market in front of the Thean Hou Temple. The business hours were from 18:00 to 24:00. However, the rapid development of Taiwan's night market was in the 1970s. There are three primary distribution laws in the early stage of the night market:



fig.43 Taipei South Airport night market under the apartments Credit: Kan Kankavee

1. Temple centered, people's demand for food and beverages in temple fairs is the main driving force, spread out along the street and gather into the whole area.
2. Due to urban planning or municipal construction, non-local residents (mostly rural) collectively relocate to new cities. People's livelihood needs naturally find a way out in the night-market economy.
3. There are schools or the commercial base of the original agricultural product distribution center or business district around.

fig.44 Aerial shot of Hanxi Night Market in Taichung, the most lively place in the city. May 25, 2019, Credit: Yu-Chu Lien, [accessed 14.10.2020] available at: <https://www.flickr.com/photos/yuchulien/49199120243/in/photostream/>



As an informal economic system, Taiwan's night market plays an essential role in the circular economy's manufacturing and retail industries, providing a sales platform for many industrial products changing from exported to domestic sales. In the 1960s, Taiwan's economy took off, and the labor-intensive, small-capital manufacturing industry began to multiply. The oil crisis in the mid-1970s caused orders to be canceled, prompting the night market to become a sales center for substandard products in addition to catering. Today's night market

is still a sales network for export manufacturers to selling defective products to all corners of the island. That provides the island's manufacturing and retail industries with the flexibility to respond to market competition and make products with low market competitiveness enter the cheaper market through the night market vendors. This unique economic role is incredibly helpful in the economic crisis.

According to the 1999 Taiwan Provincial Vendor Management Regulations, the management of vendors is ruled by the regional governments (Article

fig.45 Kaohsiung Ruifeng night market. Today, Taiwan night market is still dominated by food, manufacturing and retail industries Credit: Kan Kankavee



3).³¹ The operator must be a household, both local-registered and low-income, or has a disability (Article 7).³² And can only be within a designated period only for retail business(Article 12). And the table shall not be fixed to the ground (Article 12).³³ It can be seen that the earliest night market in Taiwan is a Street Business that is time-sensitive, movable, low-cost, and locally managed. Around 2003, Taiwan's "Department of Commerce" used the marketing of night markets as one of its organizational priorities, and tried to manage the night markets in a unified way by coaching traditional vendors to establish self-government associations. As a result, some vendors inherited from the family could continue to engage in the street food industry and were regulated in an orderly manner. Today, night market vendors are no

longer poor, low-educated workers. On the contrary, some night market vendors have engaged in other jobs or still have daytime jobs, in which middle-class people may participate.

The modern night market is no longer just a platform for food and industrial and commercial sales, but also has higher tourism and cultural value. Therefore, it is often divided into four types: sightseeing night market, street night market, shopping mall night market, and mobile night market. The night market is also a platform for local politicians to develop their networks: during the election period, it can be seen that the electoral college wanders through the major night markets, seeking visibility and gaining support from voters. The night market is definitely the best choice.

31–33. *Taiwan Ministry of Economic Affairs (1999), Taiwan Provincial Vendor Management Regulations, June 30, [accessed 14.10.2020] available at: <https://law.moj.gov.tw/LawClass/LawAll.aspx?pcode=J0080027>*

Reflection and Discussion

41 From the perspective of food, this research paper interprets how it can become a fundamental part of urbanization and the political, economic, and social attributes. Sidney Mintz divided food into two values: one is the internal value of certain foods to social groups, and the other is the external value of food consumption and social dominance.³⁴ Only by reducing the social and economic attributes of food can the people regain food sovereignty, which is the goal of the people all over the world.

One of the priorities of The Food and Agriculture Organization of the United Nations is Urban Food Agenda, which includes proposing new urban food governance. However, urban food systems are not suitable for all situations. Rural and suburbs need more localized and unique systems. Emphasizing the global and unified urban food chain is likely to make the global food problem more severe.

The visualization of informal urbanism is not to be achieved by a singular author; therefore, it's collaborative, symbiotic, unpredictable, and open-end in spirit.³⁵

The urbanization process in Taiwan and China from the perspective of the food system revealed the linkage between urban and rural has always been the primary contradiction. Land prices in Taiwan are controlled by the vicious competition of the market-based economy and even illegally invasion. At the same time, a large number of young laborers flock to the cities, and the countryside is marginalized. This also makes Taiwan's food self-sufficiency rate one of the lowest in the world. An alternative

food system and a new food-based urbanization mechanism for the rural population should be a solution that can ease the long-standing rivalry between urban and rural areas. Taiwan's informal urbanization process represented by the night market culture has shown us an alternative way out. But it exposed massive problems in the early stages of urbanization as well. Still, the night market economic prosperity has fully proved the sustainability of the bottom-up wisdom of the crowds. Rethinking and embracing the informal city and culture is a high ambition. By blurring the boundaries between cities and villages, suburban areas can play a transitional role in the formation of society.

The self-organized Transition Towns Tones reject globalization and implement localization in all aspects of districts' informal autonomous system, which has great reference value for Taiwan. However, because of different eating habits, Taiwan still needs to make improvements that suit it.

34. Sidney Wilfred Mintz(1986), *Sweetness and Power: The Place of Sugar in Modern History*, Penguin Book

35. KANG, Min Jay(2009), *INFORMAL URBANISM FROM INSIDE-OUT-INTERNALIZING TAIPEI EXPERIENCES OF INFORMALITY*, In *The 4th International Conference of the International Forum on Urbanism (IFoU)*

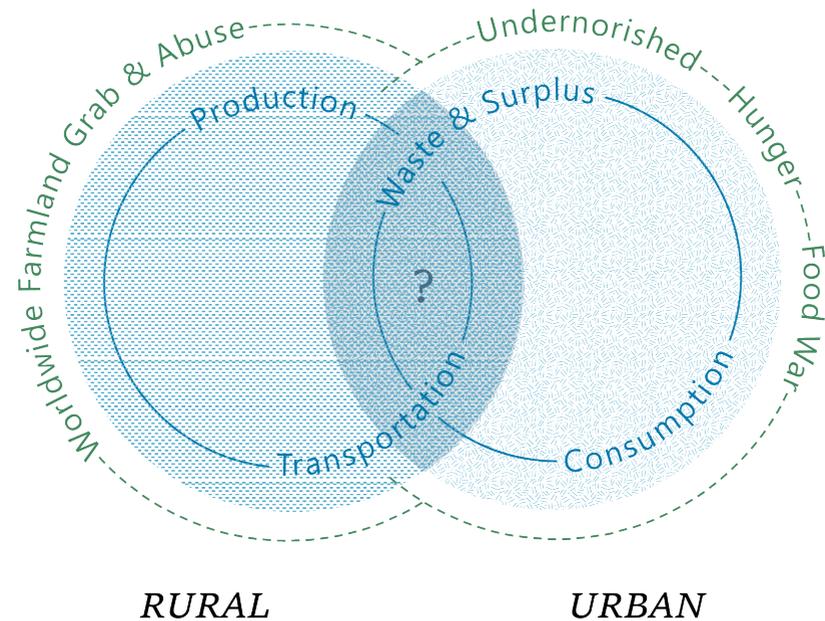


fig.46 The current problems of urban and rural areas from the urban Food Urbanism perspective Credit: author

Rebuilding the food system includes four core improvements: food production, food transportation, food consumption, and food waste & surplus management. Due to the limited land resources in Taiwan, agricultural science and farmland utilization are crucial in the food production stage. The human rights of farmers and their quality of life need to be maintained and guaranteed by the government. The logistics process of food is an important linkage that connects the rural and the city. In fact, shortening the transportation distance is equal to bridging the gap between urban and rural areas. In the consumption stage, managers should consider applying the circular economy in the food system, and scientifically and rationally increase the added value of food on the premise that people have food sovereignty. While in the waste management stage, organic food has been proved to impact climate change by environmental-friendly recycling.

As an architect and urbanist, from the perspective of food urbanism, we should explore the bridges of urban and rural areas through land usage for food. It can also optimize and update food-related spaces to create a human-based, sustainable, resilient, and nutrition-sensitive food city.

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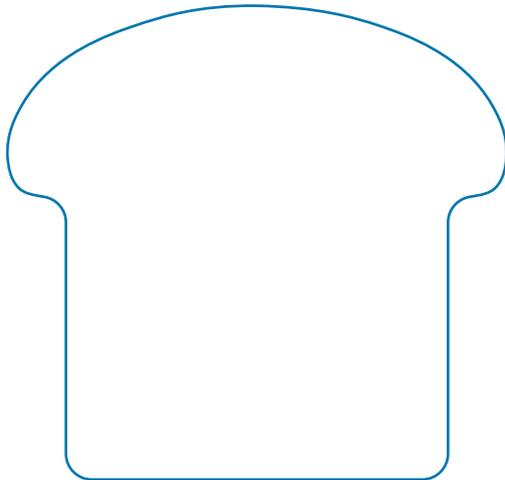
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Food and Power.