

GREAT FOOD STRONG NATION

Children's Suggestions for Transforming
Food Systems in China



ACKNOWLEDGEMENT

This report is the result of a collaborative effort of Ministry of Agriculture and Rural Affairs, UNICEF office for China, United Nations World Food Programme (WFP) China Office and Food and Agriculture Organization (FAO) China Office.

Our heartfelt thanks go to all the children from China who participated in 11 dialogues in six provinces, generously giving their time to share their insights about how food, diets and nutrition affect their lives. This project would not have been possible without the support of local government and civil society organization partners where dialogues took place.

We are greatly indebted to all the staff involved in conducting the dialogues for their enthusiasm, commitment and professionalism. Special thanks to Institute of Food and Nutrition Development, MARA and Young and Resilient Research Centre at Western Sydney University, for their technical support.

Great Food, Strong Nation: How Children's Suggestions Want for Transforming Food Systems in China

Cover photographs: Dialogues with children in Datong County of Qinghai Province, ©UNICEF/China/2021/Li Manwei

UNICEF Office for China
12, Sanlitun Lu
Beijing 100600 China
Tel: +86 10 8531 2600
Fax: +86 10 6532 3107
Email: beijing@unicef.org
<http://www.unicef.cn>

CONTENT

1 **Dialogues with Children**

2 **Children's Perceptions
and Aspirations**

3 **Children Understand that
Transformation Starts with Them**

4 **Children Call for Change**



Dialogues with Children

Every child has the right to nutrition (UNICEF, 2020). Yet around the world, far too many children are eating poor-quality diets and facing barriers to accessing and affording nutritious food, driving malnutrition in all its forms. The diets of most children around the world and in China are characterized by limited intake of fruit, vegetables, eggs, milk and/or by a high intake of energy dense, nutrient-poor, ultra-processed food (UNICEF, 2019). Simultaneously, climate change is exerting unprecedented and devastating pressure on food systems, also driven in part by the industrialization of food production and increasing demand for processed food (Serraj et al., 2019).

Understanding how children eat; what they eat; the key challenges they face in accessing quality, sustainable food; and how they wish food systems to change are paramount for a truly child-centred food system (Hawkes et al., 2020 & Neve et al., 2021). A new dialogue about food systems transformation is needed to generate discourses around food mapping, food preferences, consumption patterns, supply chains, food availability and tech solutions. The United Nations Food Systems Summit, to be held during the United Nations General Assembly in New York on 23 September 2021, is setting the stage for a global food systems transformation to support environmental sustainability and achieve the Sustainable Development Goals by 2030.

Seizing this moment, UNICEF China in collaboration with the Ministry of Agricultural and Rural Affairs (MARA) of the People's Republic of China conducted 11 food systems dialogues with children from six provinces to capture their understanding on food systems and climate change. A diverse group of children from rural and urban settings will echo their voices in the UN Food Systems Summit, as part of a global initiative with 17 other countries.

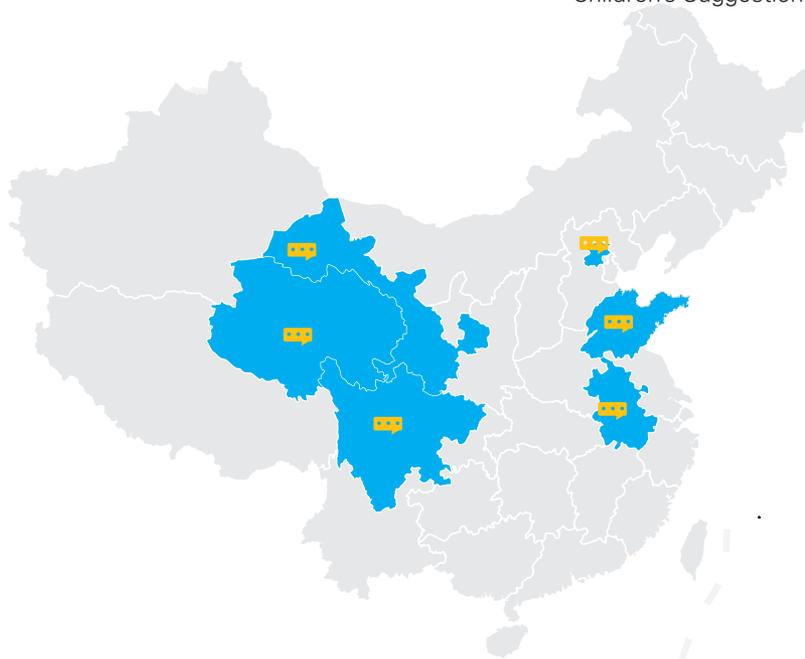


Figure 1. Eleven dialogues with children in six provinces



METHODOLOGY AT A GLANCE

11

11 workshops in six provinces in China, including Anhui, Beijing, Gansu, Sichuan, Qinghai and Shandong, from west to east (Figure 1)

Face-to-face workshops

Workshops used creative and fun exercises in small groups

275

275 children aged 10–19 years from diverse backgrounds

Activities captured children's experiences with food, challenges to food systems, and their suggestions on the best way to improve them

These workshops helped us to understand their views and perspectives on food systems, the key challenges to attaining nutritious, sustainable food, and how they believe food systems should change. The findings provided in this report uphold this “child-led” approach. Quotes from participants have been used to illustrate analysis and findings in this report. In some instances, quotes have been lightly edited for clarity; for example, minor corrections to spelling or grammar have been made to aid readability and/or to correct transcription errors. Content has not otherwise been altered.

Children's Perceptions and Aspirations



1

Children identified food consumption patterns that contributed to waste, environmental degradation and climate change.

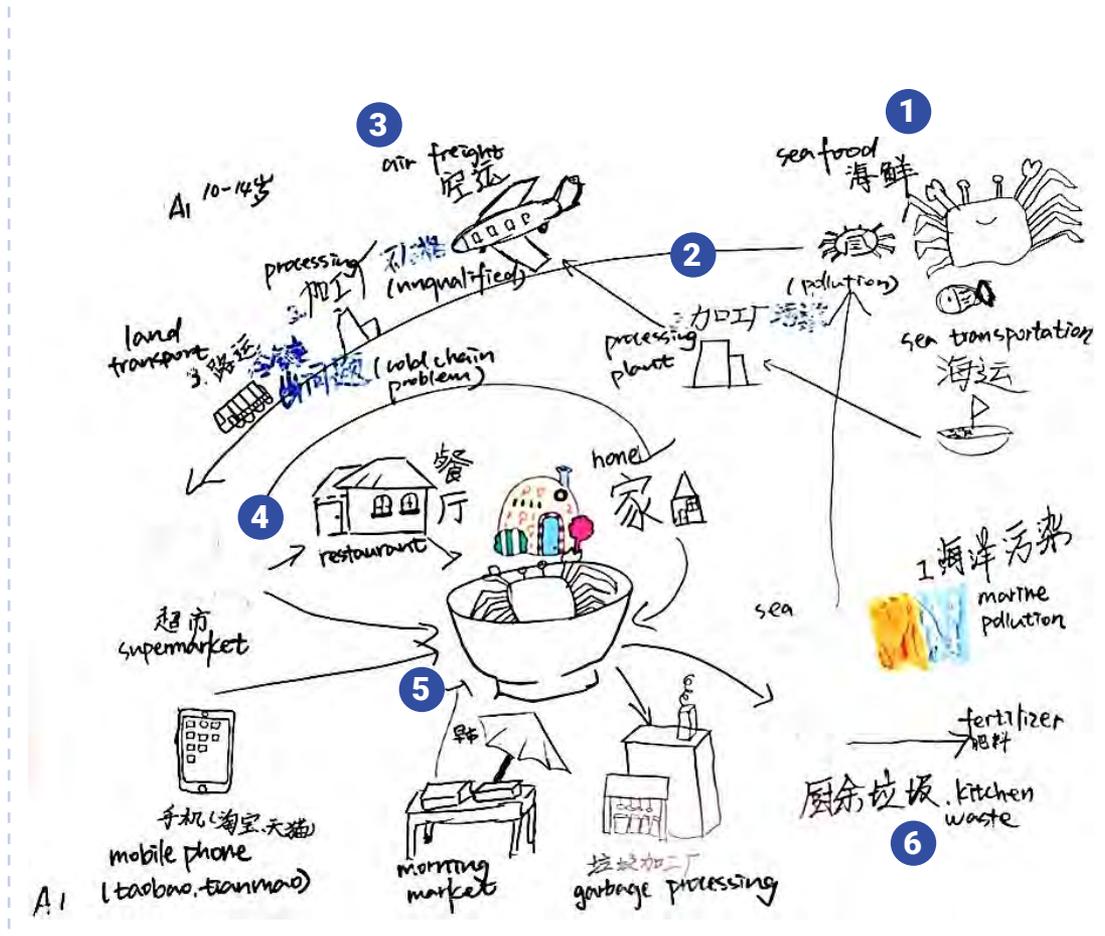
These workshops were designed to be as inclusive as possible, focusing on the food system, food poverty and climate change. In a series of fun, engaging and participatory activities, children answered questions, mapped food systems, and discussed multiple food systems issues with their peers. Participants described food as an edible substance that satisfies hunger. Food provides the energy and nutrition necessary for survival and brings happiness.

Children mapped the food system around them, visualizing how food moved from the farm to the plate. Overall, children demonstrated a deep understanding of food production. Children then reflected on the vulnerabilities or weak points in these systems, and the barriers that children face in accessing nutritious and sustainable food sources. Many children based their food maps on seafood, including fish, crabs and crayfish. Other minimally processed food items they chose to map included: blueberries, mulberries, milk, durian, potato, eggs, chickpeas, and rice noodles. Children demonstrated a deep understanding of food production in general.

In addition, children also identified issues of pollution, damage to wildlife, and problems with climate change and its relationship with the ongoing food production. Furthermore, they came up with ideas for reducing waste and lowering the environmental impact at points along the food value chain.

SEAFOOD MAP

Map for seafood production and consumption.



- 1 Seafood travels from the sea to land.
- 2 It then goes to a processing plant.
- 3 It then travels via plane to another processing plant.
- 4 From here the food travels across land to the supermarket, where it is bought to go home, or to a restaurant.
- 5 Seafood can also be bought online or from the morning market.
- 6 The waste produced is taken from home to the processing plant, or it is turned into fertilizer.

Children preferred tasty, healthy and affordable food, and disliked food that tasted bitter or smelly. Their food preferences were based largely on nutritional values and taste.



“Food is something that can replenish energy, fill our bellies, keep us alive and having nutrition”



“[Food is] something to satisfy one's hunger”

Some children perceived a lack of control over their food choices, as they could not cook or shop by themselves and depend on parents or schools for their diets. Some children mentioned that their families have problems affording certain types of food.



“Parents have the responsibility. They are also better at selecting nutritious foods”



“Sometimes parents don't agree [with our food choices]”



“[I] cannot interfere with the choice of parents; I can only raise opinions”



“Candy is bad for my teeth. Mom doesn't let me have it”

Questions were also asked about whether they had autonomy or input over their daily food choices. The majority of children reported that they did not have a choice in what foods they ate, and that parental permission was required. Parents determine what kinds of foods and meals their children eat. Children also have no food autonomy in schools.



“I can't cook by myself”



“I do not buy any food and do not do any cooking”



“[I would like to eat] big crab, [but] it's too expensive and my mom won't buy it”

3

Children are keen to express their opinion on food systems transformation and to participate in creating a food environment that meets their needs.

During the dialogue children were astute in highlighting problems affecting their local food systems, from climate impacts to distribution issues, to food safety. Children also reported a number of environmental concerns, such as pollution coming from factories and transportation. Moreover, they highlighted the damage to the wildlife, specifically marine extinction, insect damage and livestock grazing. Key issues raised by children included:



"Factory pollutants, marine debris, car exhaust, nuclear leaks, overfishing, accidents at sea (oil spills)"



"Pollutants emitted by factories that pollute water; overgrazing (degraded pastures, leading to inadequate food)"



"Climate problems"



"Disease and insect damage"



"The contamination of the marine environment has polluted the seafood ... the extinction of marine life, the influence of biological diversity"

Children understand how food is marketed – and that food purchased can differ considerably from food depicted in advertisements. Children also spoke of fluctuating food prices due to competition.



"[There is a] huge difference between the products and the advertisements"



"Vicious competition; the bad behaviour of merchants to deceive consumers; excessive publicity; government regulation is unfulfilled; imbalance between supply and demand; "

But they were also hopeful, offering a number of practical ways that food production could become more nutritious and sustainable.

4

Children offer solutions for food system transformation

Children had a variety of solutions for addressing food safety, reducing waste and limiting the environmental impacts at various points along the food value chain. For example, children emphasized opportunities for improving planting techniques and expanding breeding; enhancing packaging and cold-chain procedures; and ensuring safe meal preparation through accountability, production inspection and monitoring.

IMPROVE FOOD STORAGE SYSTEMS

These suggestions from children resonate with the academic literature, which argues that cold-chain transportation's rapid development in China establishes more sophisticated regulations (Zhao et al., 2018).

enhance packaging and cold-chain transportation

[develop] cold-chain logistics

improve planting techniques

raise cattle [with] non-hazardous fodder

expand breeding area

IMPROVE FOOD CULTIVATION

China is the second largest organic food cultivation economy in the world (Sheng et al., 2009), yet children still demand an improvement in food cultivation practices.

IMPROVE ACCOUNTABILITY WITHIN FOOD SYSTEMS

These suggestions from children are mirrored in the literature, which suggests that food safety monitoring in China can lead to improved risk assessments (Zhou et al., 2018).

production inspection and supervision

regular monitoring

SAFER MEAL PREPARATION

Children's comments here mirror the strong concerns of Chinese consumers around food safety due to numerous instances of food contamination, such as the milk melamine scandal, which resulted in milk and infant formula being contaminated with melamine, resulting in harm and death to children (Pei et al., 2011). These events were widely discussed in Chinese media and there is extensive public awareness of food safety issues.

raw fish fillets, eaten directly and not heated, should be reduced

Improve cooking technology and strengthen cooking ability



©UNICEF/China/2021/Yin Xiaohan

reduce pollution of the ocean

reduce the amount of
the disposing of waste

protect the environment

[Participate in] waste sorting, clean energy,
environmentally friendly transportation

PROTECT THE ENVIRONMENT

These are aligned with the existing environmental recommendations for food sustainability in China, which include improving efficiency of water resources use, arable land conservation, and reducing the use of agrochemicals (Liu et al., 2020).

GOVERNMENT SUPPORT

Despite centralized and localized food policies in place, there is still little communication about them to consumers (Zhou et. al., 2018).

The State will introduce relevant policies, the society strengthens social mobilization

[There is a need to] adjust the tax systems, ensure market regulation, refine regulatory approaches, and delegate power and responsibility to people





Children Understand that Transformation Starts with Them

In the workshops, children completed a concentric circles activity designed to generate concrete suggestions for change at different levels of society. In the innermost circle, children were asked how they and their families could minimize the impact of the food they eat on the environment. In the next circle, they suggested how “my community” could accomplish the same task, then moved onto “farmers and food companies” before ending at the largest circle of “government and international organizations.” We summarize their recommendations below:

1 Me and my family

Waste management

Reduce waste produced; sort waste appropriately; avoid littering; recycle; reduce plastic use; and do not buy products with excessive packaging.

Conscious consumption

Do not waste food; buy food locally; buy organic; eat seasonally; and travel less.

“Trying to walk more and drive less”

“Using fewer plastic bags”

2 My community

Waste disposal

Avoid litter; sort rubbish correctly; reduce food waste; and advocate about waste management.

Environmental concerns

Clean energy should be used, and people should travel in environmentally safe ways (e.g., on bike or by foot).

“promote waste sorting”

“travel less by car, and more often by bike or on foot”

3

Farmers and food companies

Chemical use

Decrease the use of chemicals such as pesticides and fertilizers, engage in organic and circular agriculture, and reduce the use of food additives.

Waste and packaging

Reduce waste, limit packaging, and use paper or reusable packaging.

Energy consumption

Use clean energy, replace oil and diesel with environmentally friendly energy sources, and apply energy-efficient technology in production.

Bovine farming

Keep cows in sheds, have expanded grazing areas, increase milk production, and decrease methane emissions.

In addition, children also propose other actions, such as saving water, ensuring water and soil health, planting trees, feeding animals appropriately, and using scientific methods.

"reduce the use of pesticides"

"replace gasoline and diesel with environmentally friendly new energy"

4

Governments and international organizations

Education

Teach farmers about producing healthy food.

Regulations

Limit plastic production and production of fossil fuels; enact laws about food; deliver sanctions; provide rewards/punishments; prohibit food waste; publicize regulations/policies; restrict use of pesticides; strengthen monitoring of quality control; and manage market supply/demand (capitalism with intervention).

Other concerns

Encourage use of green energy by subsidizing factories or farms that produce it; create activities around environmental protection; provide subsidies for the poor; invest in agricultural technology; and reduce plastic use.

"tax the production of plastic"

"strengthen quality control supervision"



Children Call for Change

During workshops, children wrote a “postcard to the President” – a fictional letter to their national leader outlining key changes that need to happen and how children could input into these shifts. They also offered the following solutions:

1

Strengthen food systems holistically and reduce the impact of food systems on the environment

Pay due attention to scientific and technological research and development to make vegetables contain more nutrients and produce higher yields.

Enact and implement regulations to control vicious competition, address the malpractices of merchants to deceive consumers, find a better balance between supply and demand, and end exaggerated advertising.

Set market regulations for reasonable prices of agricultural products and ensure that farmers do not suffer losses.

Ensure transparency and monitoring in the food transportation process and open special communications links to reduce accidents.

Regulate to ensure that food production processes are free from harmful chemicals and done in low-carbon and environmentally friendly ways.

Promote the protection of the environment by people across the country and strictly control the emission of pollutants from major factories.

2

Children wish to participate and be heard and to know about government actions

Ongoing dialogues with children will play an important role in creating future food systems that produce healthy, safe, and nutritious food. This kind of engagement requires clear and effective communication between them and the government. Children explained that schools are an important space in which this communication can occur, along with web-based platforms.

In these workshops, children were bold in raising their voices and demanding change. Children suggested that the food system needed to be rethought, reworked and fixed, which will require a concerted effort from local and national government, from food production company, from schools, from the farming and logistics sectors, among others. This great food transformation has never been more urgent: the health, development and prosperity of future generations depends on it.



©UNICEF/China/2021/Li Manwei



©UNICEF/China/2021/Yin Xiaohan



©UNICEF/China/2021/Cong Jin'an

REFERENCES:

- Hawkes, C., Fox, E., Downs, S. M., Fanzo, J., & Neve, K. (2020). Child-centered food systems: Reorienting food systems towards healthy diets for children. *Global Food Security*, 27, 100414.
- Liu, X., Shi, L., Qian, H., Sun, S., Wu, P., Zhao, X., Engel, B. A., & Wang, Y. (2020). New problems of food security in Northwest China: A sustainability perspective. *Land Degradation & Development*, 31(8), 975–989. <https://doi.org/10.1002/ldr.3498>
- Neve, K., Hawkes, C., Brock, J., Spires, M., Isaacs, A., Squires, C. G., & Zorba, C. (2021). Understanding lived experience of food environments to inform policy: an overview of research methods. Centre for Food Policy.
- Pei, X., Tandon, A., Alldrick, A., Giorgi, L., Huang, W., & Yang, R. (2011). The China melamine milk scandal and its implications for food safety regulation. *Food policy*, 36(3), 412-420.
- Serraj, R., Krishnan, L., & Pingali, P. (2019). Agriculture and food systems to 2050: a synthesis. *Agriculture and Food Systems to, 2050*, 3-45.
- Sheng, J., Shen, L., Qiao, Y., Yu, M., & Fan, B. (2009). Market trends and accreditation systems for organic food in China. *Trends in Food Science & Technology*, 20(9), 396–401. <https://doi.org/10.1016/j.tifs.2009.01.053>
- UNICEF. *The State of the World's Children 2019. Children, Food and Nutrition: Growing well in a changing world*. New York: United Nations Children's Fund (UNICEF); 2020
- UNICEF. *Nutrition, for Every Child: UNICEF Nutrition Strategy 2020–2030*. New York: United Nations Children's Fund (UNICEF); 2020
- Zhao, H., Liu, S., Tian, C., Yan, G., & Wang, D. (2018). An overview of current status of cold chain in China. *International Journal of Refrigeration*, 88, 483-495.
- Zhou, Y., Ding, W., & Zhou, D. (2018). Structure(al) Changes in Food System(s) and China's (Concerns) with Food Safety (Policy). *World Food Policy*, 4(2). <https://doi.org/10.18278/wfp.4.2.11>

unicef  | for every child

UNICEF Office for China
12, Sanlitun Lu
Beijing 100600 China
Tel: +86 10 8531 2600
Fax: +86 10 6532 3107
Email: beijing@unicef.org
<http://www.unicef.cn>