

## Flash Report

# Celebration of the World Environment Day 2021: Ecosystem Restoration and Sustainable Food Production and Consumption



**Date:** Thursday 3 June 2021 | 14.00-16.40 (Beijing Time)

**Venue:** Hybrid (Beijing and Real-time Live Streaming)

### Disclaimer

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## List of Acronyms:

<b>WED</b>	World Environment Day
<b>CE</b>	Circular Economy
<b>EU</b>	The European Union
<b>SCP</b>	Sustainable Consumption and Production
<b>SDGs</b>	Sustainable Development Goals
<b>SWITCH-Asia RPAC</b>	SWITCH-Asia Regional Policy Advocacy Component
<b>UNEP</b>	United Nations Environment Programme
<b>IGSNRR</b>	Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences
<b>FAO</b>	Food and Agriculture Organization of the United Nations
<b>MEE</b>	Ministry of Ecology and Environment
<b>UNFSS</b>	United Nations Forum on Sustainability Standards
<b>UNFSS-ActionTrack2</b>	UNFSS Action Track 2 – Shift to healthy and sustainable consumption patterns
<b>SMEs</b>	Small and Medium-sized Enterprises

## Background:

**SWITCH-Asia** is the programme funded by the European Union (EU) to promote sustainable consumption and production (SCP) across the Asian Region. The SWITCH-Asia Regional Policy Advocacy Component (RPAC), implemented by United Nations Environment Programme, is designed to strengthen the dialogue at regional, sub-regional and national policies on Sustainable Consumption and Production and thereby contributing to green growth and reduction of poverty in Asian countries.

**World Environment Day (WED)** takes place every year on 5<sup>th</sup> June as the United Nations' flagship day for promoting worldwide awareness and action for the environment. This year's observance of World Environment Day is on the theme of 'ecosystem restoration' and focus on resetting our relationship with nature. It also marks the formal launch of the UN Decade on Ecosystem Restoration 2021-2030.

This year, 2021, RPAC plans to celebrate the WED, with the theme of '**Ecosystem Restoration**' and the key message is '**Reimagine. Recreate. Restore**', and advocate SCP with a focus on farmland ecosystem and sustainable consumption and production in China. Farmlands now cover more than one-third of the Earth's land surface and are perhaps our most vital ecosystems to sustain human-kind. In China, farmland is facing multiple challenges, including food security risk, ecosystem degradation, reduction of cultivated land and climate change, due to the rapid industrialization, urbanization, and increased population.

Restore agricultural ecosystems by using nature, such as using crop rotations, and growing more diverse crops and integrating them with livestock would boost farm productivity. The resource circularity in food production and consumption can also contribute to the development of resilient ecosystems, such as increased agricultural efficiency through local production of food, enhanced ecosystem by adopt of agro-ecological practices and food waste composting.

## Objectives of the event

To highlight environmental issues and raise awareness on links between ecosystem restoration and sustainable food consumption and production.

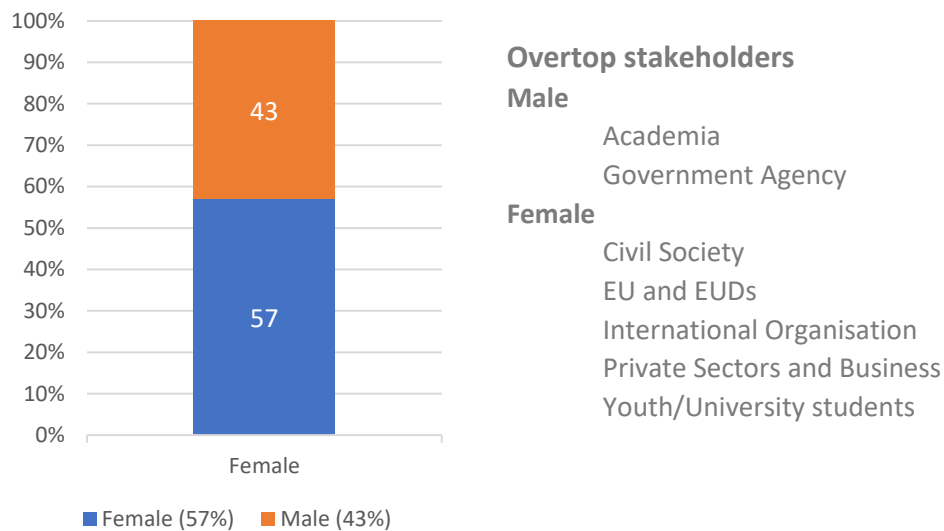
## Logistical information about the event

The national dialogue linking ecosystem restoration to sustainable food production and consumption was organized by SWITCH-Asia RPAC in partnership with Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences (IGSNRR), to celebrate the World Environment Day 2021 in Beijing (IGSNRR meeting room) with livestreaming. The event was conducted in Chinese.

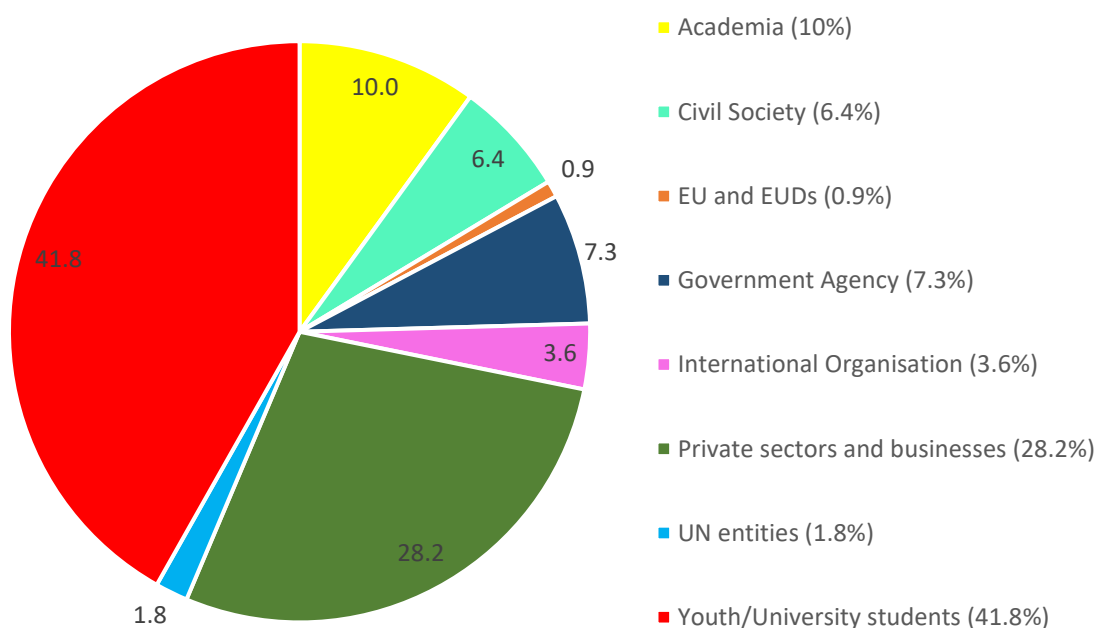
## Review on Participants:

More than 119 participants were registered prior to the event. The event was attended by 50 participants in person and reached more than 188,000 viewers via three livestreaming platforms: Vzan, Baidu and Sohu. Figures below presents the distribution of participants who registered prior to the event by stakeholders and gender. Based on total of 119 registration, 56% were female and 44% were male.

### Registration by Gender (%)



### Registration by Stakeholders (%)



## Summary of key messages:

The national dialogue on ecosystem restoration and sustainable food production and consumption, as a complimentary to the Celebration of the 2021 World Environment Day, brought together 16 notable speakers from academics, national government, international organizations, civil society and private sectors to share insights, current status, challenges, opportunities and practices on how to restore and protect ecosystem especially farmland through sustainable food production and consumption as a principle and a systematic tool.

The expert panel discussed the food lifecycle of production and farming process, logistics, storage, consumption and waste management, and their impacts on ecosystems. Mr. ZHU Yongguan from Chinese Academy of Sciences presented the Soil-Food-Environment-Health Nexus for Sustainable Development as a keynote speech. 'Soil health is the foundation of food health and human health. Fostering a healthy soil is a nexus approach for high quality development and sustainable life' he said. In this panel, technology, innovation and policy were highlighted to improve food production efficiency and circular economy in food system, as well as the potential contribution of the food system to carbon neutrality. The roles of women in sustainable food consumption and production, and how to empower rural women were also highlighted.

Good practices and case studies on sustainable food consumption and production from private sectors, civil society, practitioners and youth were presented to the meeting. The traditional nomadic husbandry culture in Qilian Mountain National Park in North-West part of China was mentioned to showcase restoration of the grassland ecosystem and production of organic food. A SWITCH-Asia Grant project on Pride on Our Plates in China aiming to preventing and reducing food waste among SMEs in China's hospitality and food sector introduced a tool for SMEs to reduce food waste through detailed measures, such as a redesigned menu. The business practice of chain shops on reduction of food waste by data technology, organic food production, alternative coffee planting, empowerment of women and youth to improve sustainable food system were exchanged.

With both panels, the RPAC successfully highlighted environmental issues arisen from food system, raised understandings on linkages between ecosystem restoration and sustainable food consumption and production, and inspired participants to take actions to improve a sustainable food system and a resilient ecosystem which are connected closely and benefit to both the planet and life.

## Welcome remarks

### **Dr. Mushtaq Memon**

UNEP Regional Coordinator for Resource Efficiency in Asia & Pacific / Project Manager to the SWITCH-Asia RPAC

Dr. Mushtaq Memon gave welcome remarks. He highlighted the critical role of technology innovation for ecosystem restoration. He said, 'Circular Economy can be key criteria for China and EU to restore ecosystems and thanks EU for supporting the SWITCH-Asia to mainstream the sustainable consumption and production'.



## Opening remarks

### **Ms. Feng Mei**

Programme Officer, EU Delegation to China

The event was opened by Ms. Feng Mei. She outlined the Switch-Asia program and highlighted its full alignment with the external dimension of the European Green Deal and of its focus areas. She said, 'Ecosystem restoration and sustainable food production and consumption are cross covered by the EU's Farm to Fork strategy, the Organic Action Plan and the more recent Zero Pollution Action Plan, which play fundamental roles to enable the changes that will lead Europe towards carbon neutrality by 2050'.

## Keynote Speech

### **Mr. ZHU Yongguan**

Academician of Chinese Academy of Sciences

Soil-Food-Environment-Health Nexus for Sustainable Development was presented as a keynote speech by Mr. ZHU Yongguan. He outlined the intricate linkage from soil, food to human. Consideration of the soil-food-environment-health nexus is required to address food security and Sustainable Development.

Soil is a renewable resource essential for food supply. Soil is also an important sink for atmospheric carbon dioxide (CO<sup>2</sup>) that can contribute to achieving global carbon neutrality. Although the importance of soil is well known, its intricate links to human health and environmental sustainability are poorly appreciated due to a shortage of knowledge on biogeochemical cascades among soil, food, environment, and human health. A healthy ecosystem would rely on healthy soils, which can provide healthy-oriented ecological products and further promote One Health (that is health of people is closely connected to the health of animals and our shared environment). Mr. ZHU stated, 'Soil health is the foundation of food health and human health. Fostering a healthy soil is a nexus approach for high quality development and sustainable life'.

## Panel I: Reimagining and Restoring Ecosystem by Sustainable Food Production and Consumption – Experts' Insight

### **Topic 1: What are the current situation and major challenges of sustainable food production and consumption, and what are the impacts on the environment and the ecosystems?**

Ms. FU Xiaotian, World Resource Institutes (China Office)

Globally, one-third of greenhouse gas emissions and more than 50% of biodiversity loss are closely related to the food system. Agricultural uses a lot of water resources and pollutes water. Sustainable food production and consumption provides an opportunity to mainstream climate actions and environmental protection through a systematic food system change, including increasing agricultural production efficiency with advanced technologies, developing green and climate resilience and smart agricultural technologies, reducing food waste based on target-measure-action methodology, as well as green financing.

Mr. DONT Le, FAO Representation in China

The food loss report issued by FAO in 2019 indicated food loss from post harvest to before sales not including the sales section, account for around 13.8% in the global food production. FAO has developed a series of tools for the agricultural value industry chain to calculate the carbon neutrality for the agricultural investment project before it is approved. FAO's new strategic framework from 2021 to 2030 proposes four focuses in agriculture and food system in the next ten years: better production, better nutrition, and better environment and better life.

**Topic 2: How to understand the connections between farmland ecosystem and circular economy? What are the current situation of resource efficiency and circularity during food production/farming process, consumption and post-consumption, and their impacts on ecosystems?**

Mr. LIU Gang, Professor, University of Southern Denmark

Circular economy strategies can be adopted to reduce the impact on the ecosystem and environment at each stage of food life cycle, from farmland production to the whole consumption and to the post-consumption stage. Prof. LIU illustrated the connections between ecological impact and resource efficiency during food production, consumption and post-consumption phases with case studies on cattle production and consumption system in Germany. A systematic solution is needed to reduce the negative environmental impact throughout the food production and consumption system, including the production technology, cold chain and storage technology, and consumer behavior change. He highlighted that greenhouse emissions would be greatly reduced through technology-based food production and agriculture, such as technologies to improve feed formula.

Mr. WU Zidan, Professor, Jilin University / Former Vice President, State Administration of Grain

Prof. WU briefed the status on grain production, distribution and challenges faced in China. Degradation of arable land, water shortage, heavy metal pollution, pesticide residue chemical pollution and fungal pollution are the main challenges faced by food production. Grain loss due to farmers' improper storage, excessive processing, and wasted food from table, exceeds 35 billion kg each year. Prof. WU highlighted the aged grain and grain loss in storage system have been drastically reduced in past 20 years in China through technology innovation applied in grain storage system.

**Topic 3: How to understand the connections between farmland ecosystem and food consumption, and how do food consumption and reducing food waste contribute to ecosystems?**

Mr. DONG Zhanfeng, Environmental Planning Institute, Ministry of Ecology and Environment (MEE)

Food waste including wasted food from catering is not only a waste of food resources and economic loss, but also a waste of land resources and cost of environmental pollution management. It also increases ecological footprint and greenhouse gas emissions. In order to minimize resource consumption and improve recycling, a closed resource loop needs to be established during the entire food life cycle from farm to table, and the subsequent treatment of food waste, which will allow waste go back to the farm and will be the direction of modern agriculture. The innovative technology and policy support are needed for the circular economy development in food system.



Ms. LIU Xiaojie, Associate Professor, Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences

Ms. LIU outlined the problems and challenges on food consumption in China. The main problems on food consumption include malnutrition, excess energy, and insufficient nutrition, caused by the solidified eating habits, the prevalence of fast food, and improper consumption behavior. For example, the serious food loss caused by over-processing are due to the over pursuit of whiteness and brightness for rice and noodles. The potential on energy saving and greenhouse gas emissions for food system are still very large.

**Topic 4: What are the roles of women in sustainable food consumption and production, and how to empower rural women for transformation to a sustainable food system and resilient ecosystems?**

Ms. WANG Qing, Programme Analyst, UN Women in China

The Women's Rights Assessment Report released by the UN Women in 2020 shows that, 39% of all female laborers work in agriculture, forestry and fishery. These women are very vulnerable to climate change impact and related catastrophe due to lack of various support. In China, 70% of the current labor force engaged in agricultural production is women. Ms. WANG gave an example from Qinghai province on women farmers' practices on sustainable agriculture which is beneficial to both ecosystems and family economy.

Qiaotou village, in the Liupan mountain area of Qinghai province, began to plant a greater variety of key crops and vegetables which could be sold nearby and avoid any problems related to shipping and delivery, during the pandemic. They also began to rear pigs, sheep and chickens. This combination of planting and breeding allowed to set up a fully organic, zero-waste circular system: animal manure becomes fertilizer, while unused produce, such as maize straw, becomes animal feed. This new practice has brought women farmers and their families out of poverty. Finally, Ms. WANG called for women's empowerment especially in the transformation to a sustainable food consumption and production system through skill trainings, financial support and policy support to rural women.

**Panel II: Cases sharing on sustainable food production and consumption contributing to resilient ecosystems**

**Topic 1: Sustainable food production - traditional nomadic husbandry and organic agriculture**

Mr. DING Wenguang, professor, School of Resources and Environment, Lanzhou University

Nomadic culture is the key to Qilian Mountain National Park, which was established in Gansu Province in 2017. There are three important rivers, Shiyang River, Shule River, and Heihe River, which irrigate more than 700,000 hectares of farmland, more than 8 million hectares of grassland and 1.1 million hectares of woodland. Qilian Mountain National Park produce very good quality of organic food, such as meat, plant and milk, based on the nomadic culture. Mr. DING mentioned that, the current grassland fences prevent the migration routes of many wild animals, causing harm and death to wild animals. The setting of no-grazing area causes the interruption and destruction of the food chain and destroys the grassland ecosystems. He highlighted that, in order to restore the grassland ecosystem, we should inherit our precious nomadic culture, which is a key element of the grassland restoration system in Qilian Mountain National Park.

Ms. ZHANG Tingting, co-founder, Organic and Beyond Corporation (OABC)

OABC, founded in 2007, is an organic food company engaging in the cultivation, production, distribution and home delivery service of organic food. Ms. ZHANG explained the contributions of organic farming to soil ecosystems and environment. Organic farming, including crop rotation, , have a very obvious ecological value varying from nature-based restoration of soil ecosystem to biodiversity protection. For example, the population of bees will increase in organic farming areas, returning maize straw to farmland and using animal manure as fertilizer can increase soil organic matter content effectively.

## **Topic 2: Sustainable food consumption - business practices that reduce food waste**

Ms. YU Xin, SWITCH-Asia GRANT on reducing food waste in China, WWF

Ms. YU introduced a case study – five restaurants in Zhejiang province prevented and reduced food waste a lot through food waste classification and measurement before and after meals, improved display method of food, menu design and other intervention methods as a pilot project conducted in 2018 to 2019.

SWITCH-Asia Grant project on Pride on Our Plates - Strengthening China's SMEs through proven food waste solutions and behavioral insights is being implemented. With aims to catalyze the prevention, reduction and diversion of food waste among SMEs in China's hospitality sector, this project will develop a series of guidelines to support 100 SMEs to apply Sustainable Consumption and Production Practices, and reduce food waste by 10% of the 50 SMEs in the hospitality and food services sector in China.

Mr. JIANG Ning, Beijing Convenience Bee Chain Business co. Ltd

Convenience Bee Chain Business operated more than 2,000 stores in 20 cities in China. Mr. JIANG introduced a series of data technology based solutions practiced in Convenience Bee Chain stores for an improved supply chain management, fast cooling and refrigerated storage, logistics, and promotion of food near the expiration date, which can not only increase economic profit, but prevent food waste. For example, when a food, such as a sandwich, is approaching the optimal eating period, and the remaining quantity is large and it is already at night, the central brain will automatically trigger the electronic price tag to adjust to a promotion price without manual decision-making.

## **Topic 3: Empowering women and youth in sustainable food production and consumption**

Ms. ZHANG Chenyang, Bon Café+: A Pilot Cafe Program

Ms. ZHANG, a reporter and producer in Phoenix TV Longxing World Program, operates a coffee starts-up with her team, offering alternative coffee beans from Myanmar with environmental protection and fair trade principles, skill trainings on coffee bean roasting for local women, sales and marketing in China. The alternative coffee planting is to use other cash crops to replace poppy planting in the Golden Triangle of Myanmar, including sugar cane, rubber and coffee beans. The objective is to help the establishment of a complete coffee industry chain for local and alternative coffee planting in Myanmar, while introducing the concepts and principles of organic farming, environmental protection and fair trade.

Ms. MA Yunxiao, Student Green Association, Tsinghua University

Ms. MA introduced a survey on food waste conducted in Tsinghua Campus and got a few interesting findings as follows, 1) the amount of food waste even in campus is big. In the survey, it is found that students in campus generate average 1.02 kg of garbage per day, among which around 50% is food waste, and 2) the delicious food in the canteen can reduce amount of food waste. In the survey, it was also found that the faculty canteen has a higher rate of 'clearing plate' than the student canteen, mainly because the food in the faculty canteen is better. 3) The food waste can be reduced if small portions or half dishes are provided for students. 4) Shortening transportation distance of cold chain can reduce food loss and waste.

Mr. OUYANG Huiyu, Youth Chair of UNFSS - ActionTrack2 China Action Hub

Mr. OUYANG introduced the global initiative Youth Act 4 Food in support of Food Systems Summit 2021 and under its Action Track 2, launched in May 2021 he joined and is working for. The Summit's Action Tracks offer stakeholders a space to share and learn, with a view to fostering new actions and partnerships and amplifying existing initiatives. He also shared a small-size research project he initiated and implemented in campus, which proposed to have a school-level sustainable food policy to provide healthy and tasty low-carbon food options for students. He highlighted the important roles of youth in the transition of sustainable food consumption and production as young generation would be heavily affected by today's unsustainable food system.

## Conclusion

Ms. FENG Mei, Programme Officer, EU Delegation to China, acknowledged the dialogue and discussion are very consistent with the theme of World Environment Day this year – Ecosystem Restoration, and basically cover every different angle of the food systems. She appreciated every speaker for their insights in the industry and a lot of ideas and thoughts shared and thanked organizing team for their contributions for the smooth holding of the dialogue.

Ms. WANG Qian, Programme Management Officer, UNEP China Office finally concluded, 'food health is an issue of common concern to government agencies, academics as well as the general public. Sustainable food consumption and production would contribute to climate change actions, carbon neutrality, soil and water resources protection and ecosystem restoration'.



## Snapshots of the event







## Annex:

### Annex 1: The Final agenda

Time (GMT)	Theme
1400-1410	<p><b>Opening Session</b> Moderated by Ms. WANG Qian, Programme Management Officer, UNEP China Office</p> <p><b>Welcome Remarks</b> Dr. Mushtaq Ahmed Memon, Regional Coordinator for Resource Efficiency, UNEP Regional Office for Asia and the Pacific, SWITCH-Asia RPAC Project Manager</p> <p><b>Opening Remarks</b> Ms. FENG Mei, Programme Officer, EU Delegation to China</p>
1410-1430	<p><b>Keynote Speech</b> <b>Soil-Food-Environment-Health Nexus for Sustainable Development</b> Mr. ZHU Yongguan, Academician of Chinese Academy of Sciences</p>
1430-1530	<p><b>Panel I: Reimagining and Restoring Ecosystem by Sustainable Food Production and Consumption – Experts’ Insight</b> Topics:</p> <ul style="list-style-type: none"> <li>- What are the current situation and major challenges of sustainable food production and consumption, and what are the impacts on the environment and the ecosystems?</li> <li>- How to understand the connections between farmland ecosystem and circular economy? What are the current situation of resource efficiency and circularity during food production/farming process, consumption and post-consumption, and their impacts on ecosystems?</li> <li>- How to understand the connections between farmland ecosystem and food consumption, and how do food consumption and reducing food waste contribute to ecosystems?</li> <li>- What are the roles of women in sustainable food consumption and production, and how to empower rural women for transformation to a sustainable food system and resilient ecosystems?</li> </ul> <p>Panelist:</p> <ul style="list-style-type: none"> <li>- Ms. FU Xiaotian, World Resource Institutes (China Office)</li> <li>- Mr. DONT Le, FAO Representation in China</li> <li>- Mr. LIU Gang, Professor, University of Southern Denmark</li> <li>- Mr. WU Zidan, Professor, Jilin University / Former Vice President, State Administration of Grain</li> <li>- Mr. DONG Zhanfeng, Environmental Planning Institute, Ministry of Ecology and Environment</li> </ul>

- Ms. LIU Xiaojie, Associate Professor, Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences

- Ms. WANG Qing, Programme Analyst, UN Women in China
- Moderator: Ms. ZHENG Lixia, SWITCH-Asia RPAC National Coordinator for China, UNEP China Office.

**Q & A** among panel speakers (15 minutes)

**1525-1620**

**Panel II: Cases sharing on sustainable food production and consumption contributing to resilient ecosystems**

Topics:

- Sustainable food production - traditional nomadic husbandry and organic agriculture
- Sustainable food consumption - business practices that reduce food waste
- Empowering women and youth in sustainable food production and consumption

Panelist:

- Mr. DING Wenguang, professor, School of Resources and Environment, Lanzhou University
- Ms. ZHANG Tingting, co-founder and vice president, Organic and Beyond Corporation (OABC)
- Ms. YU Xin, SWITCH-Asia GRANT on reducing food waste in China, WWF
- Mr. JIANG Ning, Beijing Convenience Bee Chain Business co. Ltd.
- Ms. ZHANG Chenyang, Bon Café+: A Pilot Cafe Program
- Ms. MA Yunxiao, Student Green Association, Tsinghua University
- Mr. OUYANG Huiyu, Youth Chair of UNFSS-ActionTrack2 China Action Hub

Moderator: Ms. FENG Mei, Programme Officer, EU Delegation to China

**Q & A** among panel speakers (15 minutes)

**1620-1635**

**Join #GenerationRestoration:**

One sentence or one key word shared by each speaker to call for actions and behavior change on sustainable food production and consumption for resilient ecosystems.

**1635-1640**

**Conclusion**

Ms. FENG Mei, Programme Officer, EU Delegation to China

Ms. WANG Qian, Programme Management Officer, UNEP China Office

**1640**

**Group Photo**

## For more information

SWITCH-Asia event page:

URL: <https://www.switch-asia.eu/news/world-environment-day-2021-ecosystem-restoration-and-sustainable-food-production-and-consumption-in-china/>

### **Contact SWITCH-Asia Regional Policy Advocacy Funded by European Union**

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