



2024 Youth Hackathon

“Urban agriculture” Hackathon jointly organized by FAO China and CAAS CIAR

Background

Global challenges

The current global population is persistently increasing, with an estimated projection of 9.7 billion by 2050. This necessitates the production of more food and other agricultural products on limited land and water resources, which, therefore, poses significant challenges to agricultural production and resource management.

Urban agriculture

Urban and peri-urban agriculture (UPA) can be defined as practices that yield food and other outputs through agricultural production and related processes, taking place on land and other spaces within cities and surrounding regions. It involves urban and peri-urban actors, communities, methods, places, policies, institutions, systems, ecology and economies, largely using and regenerating local resources to meet changing needs of local populations while serving multiple goals and functions. 55% of the world’s population resides in urban areas; 79% of all food produced is destined for consumption in cities; 266 million urban households are involved in crop production in developing countries.

UPA can exist in various forms, ranging from balcony or rooftop gardens in individual households to larger community gardens and vertical farms. It can also encompass ecological agritourism, urban husbandry, pet-friendly farm, as well as more extensive green spaces that incorporate agricultural practices. As a modern form of agriculture, UPA utilizes advanced agricultural technologies for horticultural, facility-based, and industrialized production. Guided by the demands of the urban market, it integrates productivity, livability, and ecology, striving to achieve high-quality, efficient, and sustainable development towards a harmonious urban-rural synergy.

Key initiatives

To evoke the creativity and activeness of young people in urban and peri-urban agriculture and to encourage young generations to exchange their ideas with their peers from all over the world, the 2024 Youth Hackathon is devoted to inspiring young people in contributing their wisdom to improve agricultural sustainability by adopting innovative and inclusive methods. Specifically, the 2024 Youth Hackathon aims to:

- **Build a global network** focused on the whole chain of urban and peri-urban agriculture with frontline executives, entrepreneurs and industry experts; identify innovative opportunities and create an enabling environment through public and private sector cooperation.
- **Share cutting-edge information, technologies and business models** to develop urban and peri-urban agriculture with innovation in feasible ways that can be applied in a true sense by countries around the world.
- **Provide ongoing support** for young creators during and after the events through the efforts of FAO, CAAS and other partners, thus empowering all hackers to solve problems.

Instructions for participation

Topics and tracks

2024 Youth Hackathon encourages young people to participate in the three tracks of “**New Technology**”, “**New Pattern**” and “**New Service**”.

Focus needs to be placed on sustainable practices and innovative technologies throughout the UPA value chain, which spans cultivation, livestock farming, fisheries, and other tertiary sectors. Emphasis should also be on integrating green spaces, maximizing land use, and fostering community engagement.

Tournament rules

Team members would ideally be between 18 and 40 years old and of any nationality. Students may have their mentors as part of the project team. Their mentor's role in the project must be highlighted. All proposals and presentations shall be conducted in English.

This Hackathon will be divided into three stages: **Preliminary Selection, Training Session and Final Competition.**

Tentative timeline and key points

- January – July: Application
- July – August: Preliminary selection
- August: Announcement of shortlist teams
- Late August – Early September: Training Session (Online)
- The 3rd Week of October: Final Competition (Online)
- November - December: Award Ceremony (Onsite, China)

Application materials

- You will complete the application as a team and send the requested materials to ciar@caas.cn and [cc ypardchina@outlook.com](mailto:ypardchina@outlook.com).
- An **Application Form** will be filled in to introduce your team
- **Innovation Solution** including a project proposal and a PowerPoint Presentation
- **Video Presentation** for 5 min to visually elaborate your innovative ideas



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Youth Hackathon Highlights

In 2022, 15 teams from 9 countries that stood out from the three-round reviewing presented their innovation for FLW. After a comprehensive evaluation by professional juries, 9 teams stood out as final winners. The top teams in three tracks were Agrotech+Fresh, Completing Mushroom—Mushroom Full Life Cycle Loss Reduction and Clear Plate.

In 2023, 18 teams from 8 countries that stood out from the three-round reviewing presented their innovation for GLCA. After a comprehensive evaluation by professional juries, 9 teams stood out as final winners. The top teams in three tracks were Cropfix, Low-Carbon Rice Catcher and Lucky Elephant Solar Irrigation.

Youth Hackathon in Numbers

Total of 300 participants

In total there were 300 participants from all walks of life who joined in Youth Hackathon till now.



Received 125+ proposals

During the application phase, we received 125+ proposals worldwide.



From 35+ countries

Participants come from 35+ countries have contributed their innovative thinking.



Supported by 60+ organizations

Over 60 organizations, institutes and companies have supported the Hackathon through financial, personnel, and in-kind approaches.

