



# Science and Technology Daily

VOL.4-NO.134

MARCH 16-17, 2024

## New Quality Productive Forces

Editor's Note:

Since President Xi Jinping first mentioned the term "new quality productive forces" in his inspection tour of northeast China's Heilongjiang province in September 2023, it has been highlighted on various occasions, as China is accelerating efforts to foster new growth drivers and promote high-quality development.

In this column, Science and Technology Daily tries to explain what the essence of new quality productive forces is, and how they enable transformation and upgrading of traditional industries and help develop future-oriented industries.

## Understanding China's New Quality Productive Forces

By Staff Reporters

New quality productive forces, in which innovation plays a leading role, mean advanced productivity that has broken away from the traditional economic growth mode and productivity development paths, features high-tech, high efficiency and high quality, and aligns with China's new development philosophy.

In the deliberations with his fellow deputies from the delegation of Jiangsu province on March 5, President Xi Jinping underscored the importance of developing new quality productive forces based on local conditions.

New quality productive forces are driven by revolutionary technological breakthroughs, innovative allocation of production factors, and deep industrial transformation and upgrading.

Xi called for efforts to step up innovation, foster emerging industries, adopt forward-thinking plans for developing future-oriented industries and improve the modern industrial system.

Developing new quality productive forces does not mean neglecting or abandoning traditional industries, Xi said, noting that a headlong rush into projects and the formation of industry bubbles should be prevented. Also, adopting a single model of development should be avoided.

The development of new quality productive forces in the world's second largest economy comes at the right time to address economic challenges.

In the latest Government Work Report, there is notable emphasis on accelerating the development of new quality productive forces as part of the efforts to modernize China's industrial system. This strategy is seen as key to maintaining and enhancing China's quality growth, both now and in the future. See page 2



This photo taken on March 14, 2024 shows a China-Europe freight train preparing to depart from the Harbin international container center station in Harbin, capital of northeast China's Heilongjiang province. (PHOTO: XINHUA)

## Editor's Pick

### Technology Revitalizes Intangible Cultural Heritage

By LIN Yuchen

China's Spring Festival serves as a vibrant stage for showcasing the nation's rich intangible cultural heritage (ICH). On the auspicious day of the Chinese Lunar New Year, an increasing number of ICH projects are taking center stage, captivating audiences nationwide.

From the recent show of a national-level lion dance team in Beijing's Beihai Park, to the live demonstrations by nearly 30 ICH inheritors at Nanjing's Confucius Temple, Chinese traditional cultural heritage is fused with new technologies that add color and joy to the lives of Chinese.

**Creating phenomenal cultural products**  
The fusion of modern technology with ICH has given rise to a new era of cultural innovation. From the holographic projection art installations at Beijing's Drum Tower and the "Omni-Chang'an" Shaanxi folk art performance in Xi'an, to

the use of 3D printing and AI in crafting intricate Tang Dynasty figurines in Zigong city, Sichuan province, the synergy of tradition and technology has birthed a series of phenomenal cultural products.

Meanwhile, in Luoyang city, Henan province, Gao Shuiwang, a representative inheritor of the national-level ICH Tang Tri-Color Glazed Ceramics, is leveraging the power of the Internet to revitalize ancient craftsmanship. Using 3D technology and AI, Gao has recreated the lost Tang artifacts such as horses, camels, vessels, and figurines, bringing them back to life in stunning detail.

These technologically infused cultural creations are not confined to museums but are also being brought into schools and communities, enriching people's daily lives with the beauty of Tang Tri-Color Glazed Ceramics.

According to Yang Hong, professor and director of the Intangible Cultural

Heritage Communication Research Center at the Communication University of China, legislation in the country has been enacted to specify measures such as inheritance and dissemination to protect intangible cultural heritage.

#### Bridging tradition and modernity

Technology not only preserves ICH but also empowers its inheritors to bridge the gap between tradition and modernity. Through the innovative use of VR experiences and interactive digital archives, younger generations are gaining unprecedented access to traditional crafts like shadow puppetry.

Moreover, technological advancements, such as 3D printing and AI, are enabling artisans like Li Changqing to revitalize ancient crafts like Sichuan's Qin-zhai clay sculptures, attracting a new wave of enthusiasts and ensuring the continued legacy of these cherished traditions. See page 3

### China Remains Leader in International Patent Applications

By Staff Reporters

Recent data released by the World Intellectual Property Organization (WIPO) highlights China's continued dominance in the fields of innovation and intellectual property (IP). Despite global economic uncertainties, China has maintained its position as a frontrunner in international patent applications, with Huawei leading the pack in submissions.

According to WIPO's statistics, international patent applications through the Patent Cooperation Treaty (PCT) system saw a slight decline of 1.8 percent, marking the first decrease in 14 years. However, China remains the largest source of international patent applications, followed by the U.S., Japan, South Korea and Germany.

Shen Changyu, commissioner of the

China National Intellectual Property Administration, emphasized the country's commitment to enhancing IP protection and fostering a favorable environment for enterprises. At a ministers' passage interview after the annual session of the 14th National People's Congress on March 11, Shen said this includes increasing communication with private and foreign enterprises to address their IP-related concerns promptly.

China's achievements in digital frontier technologies, such as AI, 5G and cloud computing, have propelled it to the forefront of innovation. Tech giants like Huawei, Baidu, Alibaba and Tencent are driving advancements in various sectors, supported by robust IP protection measures.

WIPO Director General Daren Tang lauded China's contributions to global IP

filings, highlighting its unparalleled position in the WIPO's PCT, Madrid, and Hague systems. With over 4 million valid domestic invention patents, the country leads the way in fostering innovation-driven economic growth.

WIPO envisions a bright future for innovation and creativity in China, emphasizing the importance of collaboration and inclusivity in the global IP ecosystem. As China continues to prioritize innovation and IP protection, it is poised to shape the future of technology and drive sustainable development on a global scale.

China's enduring legacy of creativity and invention, coupled with its comprehensive strength in the innovation ecosystem, reaffirms its status as a global leader in innovation and IP.

## 'Magic Grass' Tech Boosts Pacific Islands' Agriculture

### International Cooperation

By Staff Reporters

The river bank at Bula Agro Juncao Technology Demonstration Base in Fiji is covered with Juncao, a kind of fungi or grass that can prevent and control soil erosion, feed livestock and grow mushrooms.

Juncao was invented in the 1980s by Lin Zhanxi, a professor at China's Fujian Agriculture and Forestry University, who is also devoted to promoting Juncao technology in Pacific Island countries through bilateral agricultural cooperation.

The roots, stems and leaves of Juncao can absorb soil salt, and effectively improve the conditions of saline-alkali land, providing a new solution for the treatment of soil erosion and coastal saline-alkali land in Pacific Island countries.

Recently, Lin was involved in a training course on Juncao technology. 35 participants from 11 Pacific Island countries, such as Papua New Guinea, Micronesia, Tonga, the Cook Islands, Samoa and Nauru, attended the seven-day training.

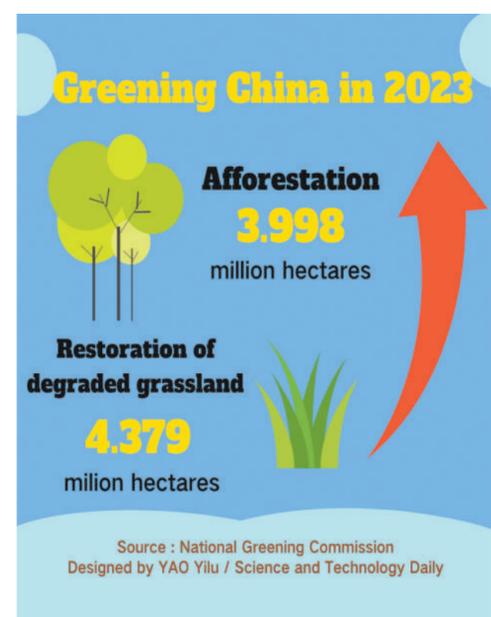
Participant Daniel Mataroa, from the Cook Islands, was amazed by the "magic grass," saying it can improve the ecological environment and land productivity.

Applying this technology, the group planted mushrooms on the first day of training, using Juncao as a medium, and saw the mushrooms grow within a week. "It is easy to learn, even elderly people and children can participate in the mushroom farming to increase family income," said Mataroa.

During training, Lin said that he expected a wider application of Juncao technology through this course, so that it can benefit Pacific Island countries.

Since the China-Fiji Juncao Technology Cooperation Project launched in 2014, around 2,400 participants have been trained, with more than 2,000 hectares of Juncao grass planted in the country, according to Fijian agriculture official Tekini Nakidakida. "It is indeed a tool that will alleviate poverty and create a sustainable environment for everyone," said Nakidakida.

### New Graphic



WECHAT ACCOUNT



E-PAPER

