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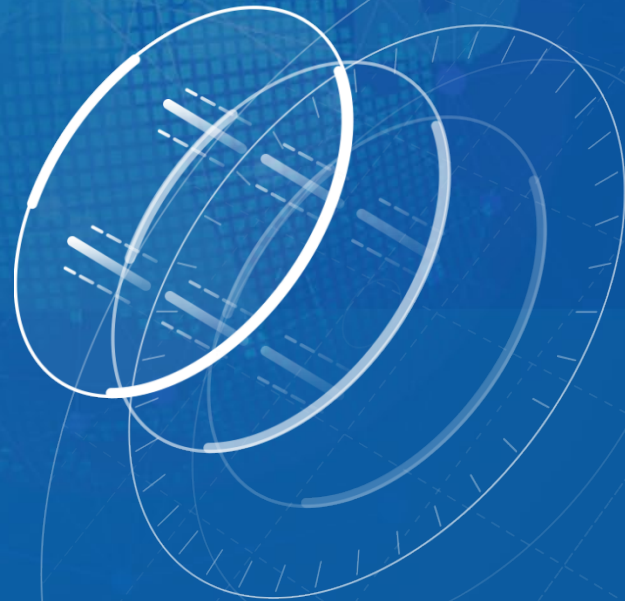
International Research and Training Center  
for Science and Technology Strategy  
under the Auspices of UNESCO  
国际科学和技术战略研究与培训中心



**CASTED**

# **CISTRAT and Its Role in STI Policy Research and Transformative Progress**

**Zhe LI, Director of Research Management Office  
CISTRAT/CASTED  
May 17, Kuala Lumpur**



# Introduction of CISTRAT



- International Research and Training Center for Science and Technology Strategy (CISTRAT) , based on Chinese Academy of Science and Technology for Development (CASTED) , was established in 2012
- The 7th UNESCO Category II Centre in China
- The 1st UNESCO Category II Centre to focus on Science and Technology Policy
- Chair of governing board: Vice Minister of Ministry of Science and Technology of China
- Director: President of CASTED
- Mission: Carry out international cooperation, professional training and experience sharing in STI strategy and policy research
- Annual event: The international training workshop offered to STI policy makers, researchers, teachers from developing countries etc..





# Training Workshops

With the support of the Ministry of Science and Technology, UNESCO and the Chinese National Commission for UNESCO, CISTRAT holds international training workshops **every year since 2012**.



## Theme

STI Policy Research and Method



## Topics

Climate change, science and technology finance, Global Innovation Index, science and technology evaluation system, inclusive innovation, and science and technology talent policy, etc.



## Trainees

S&T policy officials, researchers, teachers from Afghanistan, India, Iran, Nigeria, Pakistan, Serbia, etc.



# Research Achievements

- Collaborated with Clarivate and Elsevier to discover emerging technologies and cutting-edge technologies
- Introduced 100 hot topics and 10 emerging technologies based on Derwent Patent Database.
- Analyzed more than 200 topics and 40 cutting-edge technology clusters based on Elsevier database.
- Issue *The National Innovation Index Report*, *The Evaluation Report on China's Regional Scientific and Technological Innovation*, *Annual Report on China's Science and Technology Finance Ecology*, etc.
- Completed the translation and publication of the *Chinese version of Frascati Manual* (7th edition) and *Oslo Manual* (4th edition).



# Academic Exchanges

## Open Science

Engaged in workshop on Open Science in 25 Mar 2023 (EU) and on UNESCO Open Science Outlook in Jan 2024 (CAS)

## Women in STI

Made a keynote speech at the 2nd Summit on **Female Scientists** of the 2023 Pujiang Innovation Forum.



## Open Innovation Ecosystem



Hosted the Belt and Road Seminar themed “**Create an Open Innovation Ecosystem**”.

## Sixth African STI Forum



Shared China's experience in **gender equality** in the field of STI, education empowered by science and technology and digital transformation.

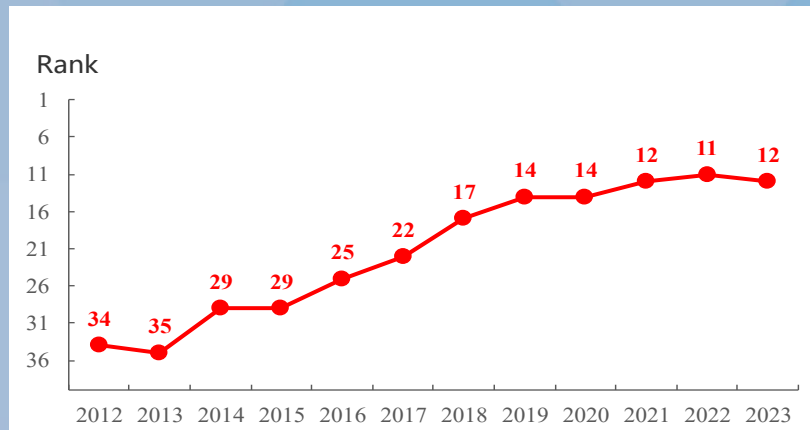


## Belt and Road STI Think Tank Network

**The Belt and Road STI Think Tank Network** was initiated by CASTED. CISTRAT leverages the research resource of this network. The platform facilitates the collaborations and exchanges in terms of information, talents and resources.

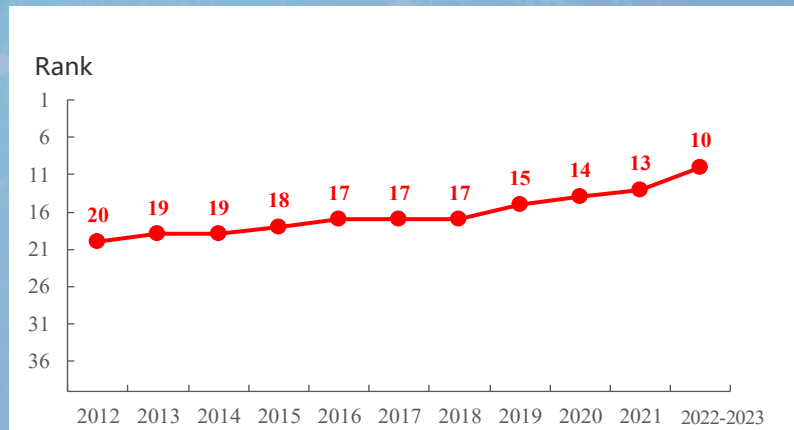
# CISTRAT's Role in STI Policy Research and Transformative Progress

## Global Innovation Index—China



Source: World Intellectual Property Organization

## National Innovation Index—China

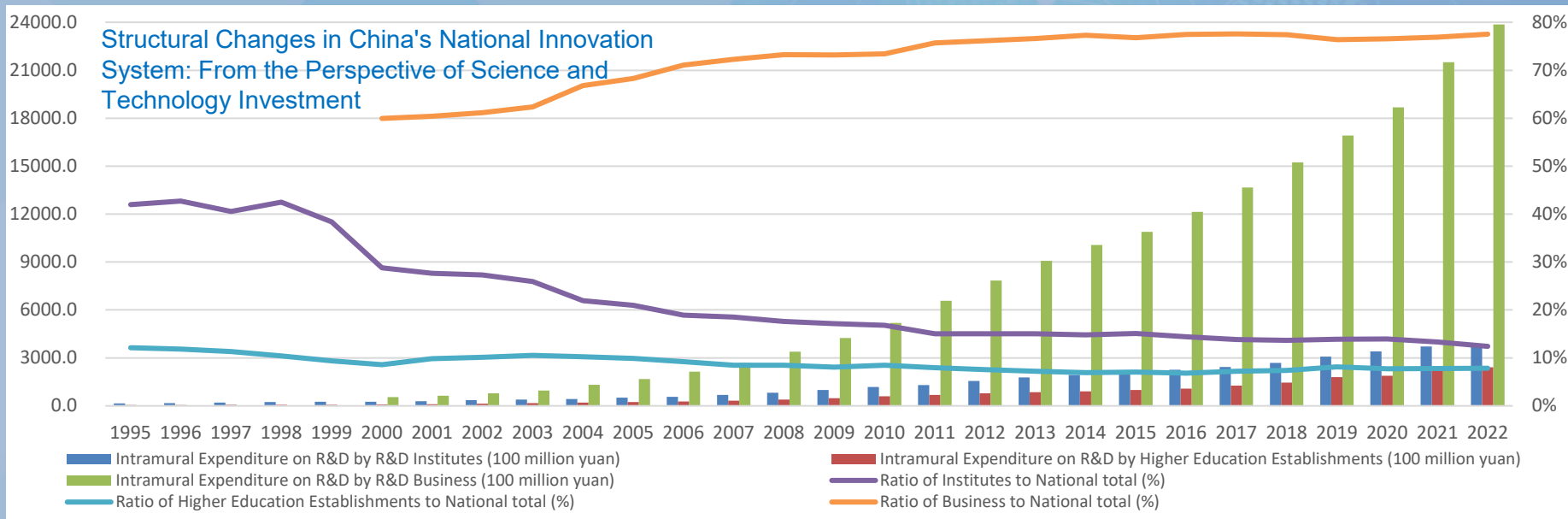


Source: Chinese Academy of Science and Technology for Development

- **Transformative Progress are happening in China based on STI.** As the biggest developing country, China is striving to explore an innovation driven development path, a **sustainable development path**. STI plays an important supporting and leading role in promoting economic and social development, improving people's livelihoods, environment protection and other aspects.
- **CISTRAT** has conducted extensively **statistical, monitoring, and evaluation work** around China's innovation progress, and is an authoritative institution for scientific and technological statistical research in China.



# CISTRAT's Role in STI Policy Research and Transformative Progress



- **STI System is the foundation of transformative progress**, which is undergoing profound structural changes in China. From the perspective of R&D expenditure structure, the R&D expenditure of universities and research and development institutions has maintained a continuous growth, but the proportion has been declining. Enterprise R&D expenditure has maintained a high-speed growth, accounting for nearly 80% in recent years.
- **CISTRAT**, accompanied by changes in the NIS, has participated in all previous national scientific and technological development **planning** research, formulation and revision research of science and technology **laws and regulations**, as well as scientific and technological system reform research. It also supported policy research and design on various topics, including enterprise scientific and technological innovation, basic research, S&T achievement application, science and technology finance, science parks etc..



# CISTRAT's Role in STI Policy Research and Transformative Progress

- **Transformative Progress leads to new policy themes**, such as the coordinated development of education, technology and talent (STEM); regional innovation; scientific and technological integrity; international S&T cooperation; scientific ethics triggered by generative AI, brain computer interface and other new technologies, etc..
- **These themes have a profound impact on sustainable development and need joint attention from countries around the world, CISTRAT** are providing strong support for policy research, formulation and international exchanges.

Themes	Policies	Time	Policy Highlights
Coordinated development of education, technology and talent	Several measures to further strengthen the training and utilization of young scientific and technological talents	2023.8	The proportion of young scientific and technological talents under the age of 40 serving as national major scientific and technological task leaders and backbone personnel shall not be less than 50%; The proportion of young scientific and technological talents under the age of 45 in the compilation of national scientific and technological plans (special projects, funds, etc.) project guidelines shall not be less than one-third.
Scientific and technological integrity	Opinions on Strengthening the Governance of Science and Technology Ethics; Measures for the Review of Science and Technology Ethics (Trial)	2022.3 2023.9	The development of scientific and technological activities should follow the ethical principles of promoting human well-being, respecting the right to life, adhering to fairness and justice, reasonably controlling risks, and maintaining openness and transparency.
International scientific and technological cooperation	Several Measures to Further Encourage Foreign Investment in Establishing Research and Development Centers	2023.1	Support foreign-funded research and development centers to use large-scale scientific research instruments, scientific and technological reports and related data from national major scientific and technological projects in accordance with the law; Encourage and support foreign-funded research and development centers to undertake national scientific and technological tasks and participate in major national scientific and technological projects.
Transformation of scientific and technological achievements	Special Action Plan for Patent Conversion and Application (2023-2025)	2023.10	The conversion efficiency of patents should be taken as an important evaluation criterion in all levels of evaluation; Continuously expanding intellectual property trade; Increase support for intellectual property financing and credit policies, and optimize the disposal mode of intellectual property collateral.
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# Looking to the Future

**CISTRAT, around the direction of SDGs and IDSSD**, will deepen the **research and training**, and will provide more evidence-based policy cases, new ideas and insights. We will always be open to cooperate, be ready to contribute to SDGs.

- ◆ Do joint researches based on topics of common interests. Continue to pay attention to *innovation theory, innovation system, open science, technology foresight, digital transformation, gender balance and S&T for social and economic development*, etc.
- ◆ Encourage personnel exchanges. We will encourage scholars, especially young scholars, to do online and off line exchanges.
- ◆ Co-host meetings and seminars on science and technology to facilitate the International Decade of Sciences for Sustainable Development.



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# THANK YOU