



Chinese Academy of Science and Technology for Development 2020

International Research and Training Centre
for Science and Technology Strategy
under the Auspices of UNESCO



United Nations
Educational, Scientific and
Cultural Organization



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for Science and Technology Strategy
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In 1982, the National Research Center for Science and Technology for Development (NRCSTD) was established, with the autograph of Mr. Deng Xiaoping.

In 2007, the Chinese Academy of Science and Technology for Development (CASTED) was established on the basis of the NRCSTD.

In 2017, CASTED was designated for incubation as a China Top Think Tank.

In 2020, CASTED officially joined the China Top Think Tanks pilot program.

中國科技促進發展 研究中心

許小宇

Chinese Academy of Science and Technology for Development



Chinese Academy of Science and Technology for Development (hereafter referred to as CASTED), a public institution affiliated to the Ministry of Science and Technology (MOST) is committed to providing strategic insights and decision-making consultations for China's science, technology and innovation (STI) development. It was inaugurated in 2007 on the basis of the former National Research Center for Science and Technology for Development (NRCSTD) established in 1982. In 2020, CASTED joined the China Top Think Tanks pilot program.

CASTED has eight research institutes, namely, Institute of Comprehensive Development,

Institute of Science and Technology Systems and Management, Institute of Foresight and Evaluation, Institute of Science and Technology Statistics and Analysis, Institute of Science and Technology Investment, Institute of Science and Technology for Industrial Development, Institute of Rural and Regional Development, and Institute of Science, Technology and Society; as well as three administrative departments, including Office of General Management and Supervision, Office of CPC CASTED Committee and Human Resources, and Office for Think Tank Operation and Research Management. It publishes two journals, i.e. *Forum on Science and Technology in China* and *China SciTechnology Business*. In addition, it runs a post-doctoral research center, eligible for accepting admissions to doctoral programs; and administers two national associations including China Federation of Scientific and Technological Institutes and China Society for Science and Technology Indicators. Besides, it hosts the International Research and Training Center for Science and Technology Strategy (CISTRAT) under the auspices of UNESCO,

which is the first Category II center of UNESCO to focus on research and training for S&T policy and innovation strategy. CASTED has built various international cooperation platforms, including China-US STI Think Tank Dialogue Series, "Belt and Road" Cooperation Network of STI Think Tanks, China-Japan-ROK S&T Innovation Policy Research and Cooperation Platform and the China-Germany Innovation Policy Platform.

For nearly 40 years, CASTED has always oriented itself towards the needs of national development in a pioneering and pragmatic way and has become a major research base for China's STI strategy, planning and policy. Looking forward, guided by Xi Jinping's Thought on Socialism with Chinese Characteristics for the New Era, CASTED will study and implement General Secretary Xi Jinping's important remarks on science and technology innovation, and strive forward with one heart and mind to build a specialized international top think tank that provides high-quality research for China's key STI policy making in a patriotic, open-minded, righteous and innovative way.

Address from CASTED Leadership

The year 2020 was an extraordinary year for the world. It is marked by the full outbreak of Covid-19 pandemic, the acceleration of the unprecedented changes in the world, the violent ups and downs in the international political and economic order, and the anxiety of many countries and regions. The year 2020

will also be remembered by CASTED. After five years of arduous transition and hard work, we are excited to join the China Top Think Tanks pilot program.

To build a new type of think tank system with Chinese characteristics is a major decision made in accordance with China's overall development, and the China Top Think Tanks pilot program is an important initiative and demonstration project for this decision. Once we joined, we know that we have a great responsibility and a glorious mission ahead of us. We will always take it as our commitment to accelerate the development of CASTED as China Top Think Tank.

Guided by Xi Jinping's Thought on Socialism with Chinese Characteristics for the New Era, we have explored the feasibility of the President's accountability system; organized seminar sessions on the 19th National Congress conferences and the 2nd, 3rd, 4th and 5th Plenary Sessions of the 19th Central Committee; always focused on General Secretary Xi Jinping's important discourse and instructions on STI and major decisions from the central government; and set up study sessions on development strategies, reform policies and emergency response measures about how to support China to become a technological power in the world, self-sufficiency in science and technology, innovation-driven and high-quality development, China-US relations in science and technology, pandemic control with science and technology and support for production resumption.

International Research and Training Centre for Science and Technology Strategy (CISTRAT) under the Auspices of UNESCO



The International Research and Training Center for Science and Technology Strategy (CISTRAT) under the auspices of UNESCO is the first Category II center of UNESCO to focus on research and training for S&T policy and innovation strategy, and also the only Category II center of S&T strategy and policy in China. Since its inauguration in September 2012, CISTRAT, hosted by CASTED, has shared China's experience with developing countries in extensive areas including sustainable development, S&T strategy, and S&T for poverty reduction through research collaboration and training activities geared to improving their S&T strategy research and management.

Adhering to the global value of the community of human destiny, we have held the China-U.S. STI Think Tank Dialogue Series, built "Belt and Road" Cooperation Network of STI Think Tanks, organized and participated in a variety of international forums and seminars, carried out international cooperation on research projects and academic exchanges, shared China's experience on pandemic control with science and technology at various international platforms, and encouraged different countries to learn from each other on science and technology strategies and policies to serve our role in national diplomacy and international communication.

We have always been modest, prudent and positive in our pursuit for a win-win cooperation: we take the initiative to communicate with policy-making departments; establish institutional cooperation with other China Top Think Tanks in science and technology and other well-known think tanks; and frequently cooperate and interact with science and technology administration departments, research institutions, universities and enterprises across the country. While accelerating our own growth, we are doing our best to meet the needs of all parties and serve the society.

At each major milestone in CASTED's track towards China Top Think Tank, including long-term planning, selection of major topics, resource integration, and innovation of institutions and mechanisms, we are very grateful for the care and assistance of the Publicity Department, the guidance and support of the Ministry of Science and Technology, and the full support of our partners.

Looking forward to 2021, we will continue to follow Xi Jinping's Thought on Socialism with Chinese Characteristics for the New Era, and strive forward with one heart and one mind in our patriotic, open-minded, righteous and innovative way. We are full of expectations for a significant improvement in our strategic judgment capability and decision support capability, more excellent cooperation with more domestic and foreign counterparts and partners, and

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1.1 Key words



1.2 Milestones

1. CASTED officially joined the China Top Think Tank (CTTT) pilot program.

On March 2nd, 2020, CASTED joined the China Top Think Tank pilot program as a member of its second group.

2. First plenum meeting of CASTED CTTT Council

On January 6, 2020, CASTED CTTT Council held its first plenum in 2020 in Beijing, with Minister Wang Zhigang as the Chairman of the Council.



3. China-U.S. STI Think Tank Dialogue Series was developed into a long-term and systematic program.

In June, 2020, CASTED and Center for Strategic and International Studies (CSIS) agreed to jointly hold the China-US STI Think Tank Dialogue Series every year.

CSIS | CENTER FOR STRATEGIC AND INTERNATIONAL STUDIES | POLICY FORUM IN CHINA-USA BUSINESS & ECONOMICS | 2nd US-China S&T Think Tank Dialogue Series Session 1: Innovation Capacity of the United States and China

Opening Remarks



Hu Zhijian
President, Chinese Academy of Science and Technology for Development



Scott Kennedy
Senior Advisor and Trustee Chair in Chinese Business & Economics, CSIS

To ask a question or make a comment, use "raise hand" under "participants."

[@CSISCBE](#) [@CSISCBE](#) csis.org/programs/chinese-business-and-economics

4. CASTED led the efforts in building "Belt and Road" Cooperation Network of STI Think Tanks.

The "Belt and Road" Cooperation Network of STI Think Tanks, initiated by CASTED and jointly developed with think tanks from Egypt, Thailand, Pakistan and other "Belt and Road" countries, was officially launched at the 2020 Shanghai Pujiang Innovation Forum.



5. CASTED published research on China-CEEC STI Scorecard

In September 2020, CASTED, in collaboration with Clarivate Analytics, released the *China-CEEC STI Scorecard* to fulfill the proposals made by General Secretary Xi Jinping at the China-CEEC Summit.

6. The post-doctoral research center of CASTED was awarded the National Outstanding Post-Doctoral Research Center

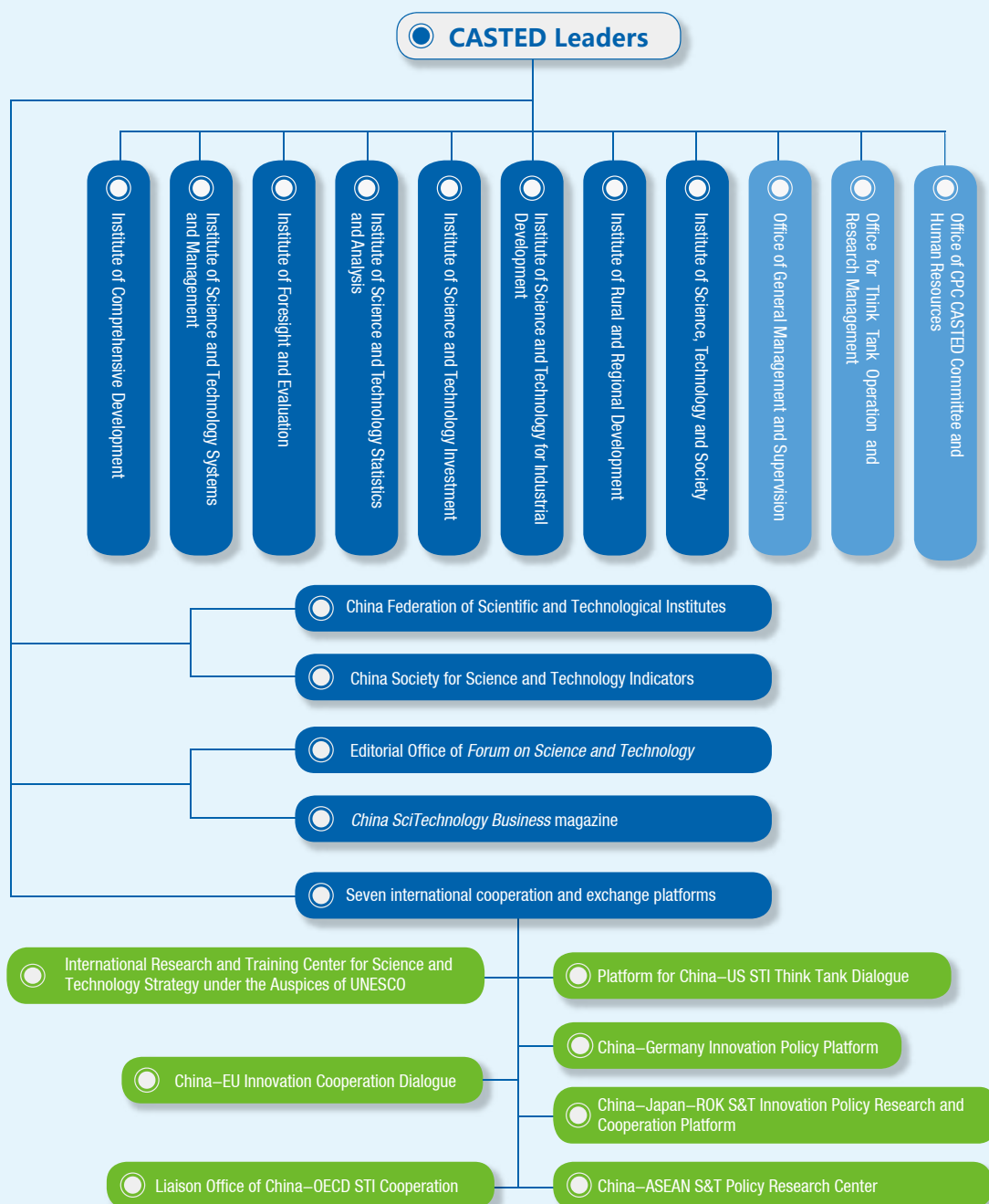
In the comprehensive evaluation of postdoctoral programs of 2020 organized by the Ministry of Human Resources and Social Security and Administration of Post-Doctoral Researchers, the postdoctoral research center of CASTED was awarded the National Outstanding Post-Doctoral Research Center.

7. CASTED held the first training session for science and technology think tanks

On October, 2020, CASTED held the first training session for science and technology think tanks nationwide in Lianyungang to support the development of S&T think tanks across the country.



1.3 Organization Chart



2.1 For urgent demands of major decisions from the central government

Continuous study of General Secretary Xi Jinping's important discourse on STI and completed the *In-Depth Study of Xi Jinping's Important Discourse on Science and Technology Innovation*

According to the instruction of Minister Zhigang, Vice Minister Li Meng organized to set up a special work mechanism to carry out research on the topic of "In-Depth Study of General Secretary Xi Jinping's Important Discourse on STI" and to complete the *In-Depth Study of Xi Jinping's Important Discourse on Science and Technology Innovation*.

Research support for the National Science and Technology Advisory Committee

As the hosting organization of the National Science and Technology Policy Making Advisory Research Center, CASTED carried out research on national long-term S&T development strategy, recent key technology risks, basic research enhancement, driving forces of new technology revolution, and the system of nationwide support for STI; and supported and served relevant advisory meetings and seminars of the National Science and Technology Policy-Making Advisory Committee.

Special studies on the instructions of the central leadership

CASTED handled the instructions of the central leadership represented by General Secretary Xi Jinping on the impact of the pandemic, dual circulation of domestic economy and international economy, digital technology, etc., and submitted 32 related reports; and supported the National Congress in the revision of *Law of the PRC on Progress of Science and Technology*.

Full participation in national science and technology planning and research

CASTED conducted research on National Program for Long- and Medium-Term Scientific and Technological Development (2021-2035) and the preparation of national STI program for the 14th Five-Year Plan; led the research on four topics, including the general concept of "National Long- and Medium-Term Science and Technology Development for 2035"; participated in the research on S&T investment and management strategy as well as regional STI strategy; and led the study on the *14th Five-Year Plan for National High-Tech Development*.

Projects and tasks of the CTTT Council and the Publicity Department

CASTED undertook 14 key think tank projects, including "Major Risks Affecting China's Science and Technology Development and Measures for Prevention and Response" and "China-US Strength Comparison in Science and Technology", and submitted 32 Think Tank Reports, of which one was adopted by *China Top Think Tank Report* and two were published by the *Achievement Report of National Social Science Foundation*.

Sixth Round of National Technology Forecasting

On the basis of three rounds of large-scale surveys in 2019, CASTED pushed forward with the data analysis and drafted reports in 17 fields, and carried out research on the selection of key technologies for China to produce reports such as the *Country-by-Country Report on Technology Competition*, *Technology Survey Analysis Report*, *Report on Selection of Key Technologies for China*, etc., providing support for the preparation of national long- and medium-term science and technology development plans. Among these reports, *Network and Information Technology Development Trends and Suggestions* was responded by the central leadership.

2.2 For implementation of China's innovation-driven development strategy

Research on China-US S&T relationship

Completed *China-US Strength Comparison in Science and Technology* and other 31 special reports based on research revolving around China-US S&T competition and *U.S. Innovation and Competition Act*, of which 5 reports were submitted to the State Council, and 2 were responded by the central leadership.

Dedicated research on pandemic control with science and technology

Organized and conducted special studies on pandemic control and formulated 43 special reports; participated in the preparation of the *Blue Book on the Progress of Coronavirus Traceability*; collaborated with Renmin University of China and Chinese Academy of Social Sciences on a special investigation on the pandemic and submitted a series of research reports and investigation reports.

Research on S&T system reform

Completed research on major topics such as "accelerating the reform of scientific research institutions" and "major issues in artificial intelligence governance" from the Ministry of Science and Technology (MOST); and provided research support for policy introduction regarding national technology innovation projects, national science and technology

planning system, enterprise innovation, S&T risk prevention, supply chain security, etc.

Research on finance technology and technology finance

Carried out research on subjects such as digital currency and blockchain to help prevent technology finance risks under pandemic; conducted research on S&T investment, S&T finance and taxation; conducted research on S&T investment, S&T finance and taxation; participated in the research and design of national STI funding programs as well as the research and formulation of import and export tax preferential policies; and cooperated with the National Bureau of Statistics to organize the 19th national survey of venture capital and draft *China Venture Capital Development Report*.

Research on artificial intelligence

Joined research projects on "development trend of smart economy in BRICS countries", "governance system and capacity modernization supported by next-generation information technology", and "major issues in artificial intelligence governance", etc.; as well as completed and released *Annual Report on the New-Generation of Artificial Intelligence Development in China 2020* at the 13th Pujiang Innovation Forum.

Research on innovation

Completed *National Innovation Index Report 2019 (English Edition)*, *Evaluation Report on Innovation in China's Enterprises 2019*, *National Innovation Index Report 2020*, *Monitoring Report on Innovation Capacity of Chinese Regions 2020*, and finished the translation of *Frascati Manual (7th Edition)* and *Oslo Manual (4th Edition)*.

Research on S&T talents

Carried out research on topics such as "STI talent cultivation program oriented to 2035", "annual monitoring of scientific research and academic atmosphere", "key issues on 'fame and fortune' of scientific researchers"; cooperated with the Chinese Association for Science and Technology (CAST) to complete the "Survey on Time Utilization of S&T Practitioners in China", and produced reports including *How to Help Young International Talents Give Full Play to their Strengths in the New Era*, *An Objective Observation over the Changes in International Ranking of Chinese Universities*, and *"One-Size-Fits-All System Is Not the Best Solution for Evaluation of Representative Works"*.

Research on rural revitalization

Analyzed and researched the socialized service system of agricultural technology, major issues in the digitalization of agriculture and rural areas, and the S&T special correspondent



system in the new era, which resulted in a series of important reports, including *Socialized Service System of Agricultural Technology: Theory and Practice, Urgency, Key Points and Countermeasure Suggestions of China's Agricultural Digitalization, Leveraging Digital Transformation to Relieve the Innovation Pressure of Agricultural Enterprises, Problems and Solution Suggestions for Innovation in S&T Special Correspondent System in the New Era* and *Rural Development Risk Control of Villages under Poverty in the Deep Mountains of Wumeng*.

Research on Industrial S&T and High Quality Development

Revolving around topics such as STI, strategic emerging industries and high quality development, formulated special reports including *Strategies for Modernizing China's Industrial Chain, Cultivating "Invisible Champion" Enterprises to Promote the Transformation and Upgrading of Manufacturing Industry, Driving Regional High-Quality Development with STI and High-Quality Development of the 14th Five-Year Plan Supported and Led by STI*; and published indicators about strategic emerging industries on a regular basis.

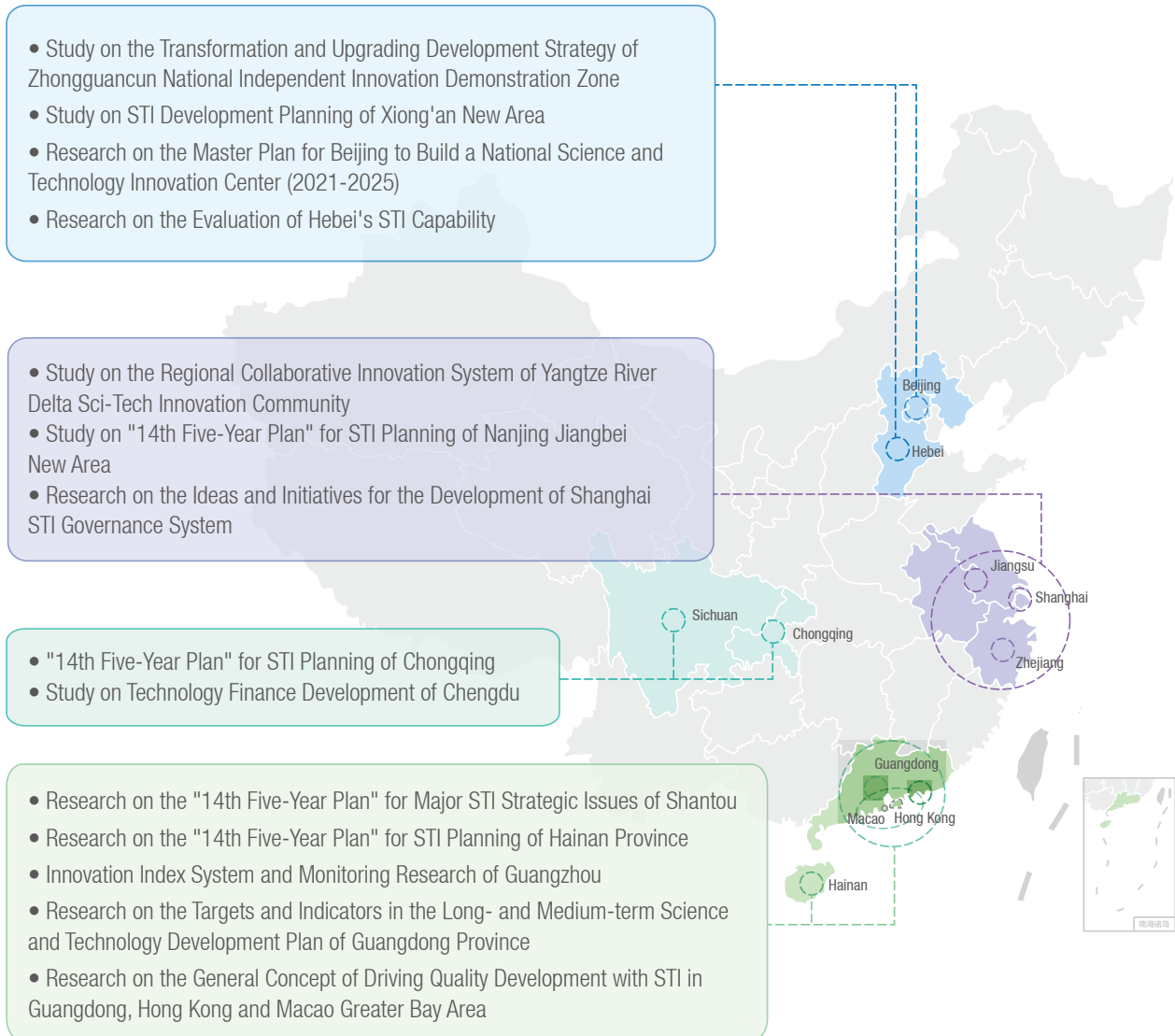
Research on S&T ethics

Completed the project of a survey on ethical awareness of medical researchers undertaken from National Natural Science Foundation of China and drafted a series reports including *Public Attitudes towards the Clinical Application of Gene Editing Technology in China, Reflexivity and Public Participation in Science and Exploration into Ethical Responsibilities in Medical Research from the Perspective of Responsible Research and Innovation*.

2.3 For regional layout of major national strategies and innovation development across the country

Focusing on major regional development strategies, CASTED carried out research and compilation of relevant documents on how to help build a new development pattern for China Western Development in the new era and how to support high-quality development driven by innovation in the northeast region. It has also actively provided consultation for the STI development of regions including Beijing-Tianjin-Hebei, Yangtze River Delta, Guangdong-Hong Kong-Macao Greater Bay Area, Yangtze River Economic Belt, and Chengdu-Chongqing Economic Circle.

For local STI development, CASTED has undertaken strategic research and planning for the STI development of Beijing, Hebei, Shanghai, Zhejiang, Jiangsu, Guangdong, Hubei, Inner Mongolia, etc.



2.3 For regional layout of major national strategies and innovation development across the country

PART III

Research Achievements

3.1 Achievements for policy-making



CASTED submitted 32 reports to *Think Tank Report*, published 85 think tank views and think tank news, and drafted 7 think tank work briefs. Among these, content related to the technology competition assessment and cooperation opportunities between China and the U.S. was adopted by *China Top Think Tank Report*, and two research reports on US S&T policies and China-US S&T relations were published in the *Achievement Report of National Social Science Foundation*.

CASTED submitted 38 issues of *Special Reports on US-China Science and Technology Relations*, among which 5 issues were submitted to the State Council, and 2 issues were responded by the central leadership; published 43 issues of *Special Reports on the Covid-19 Pandemic*, among which 3 issues on S&T governance in pandemic control and the impact of Covid-19 on China's high technology were submitted to the State Council and 2 of them were responded by the central leadership; submitted 7 research reports and special reports to the Ministry of Science and Technology, among which 3 reports on biosecurity, China-U.S. innovation capacity and regional science and technology innovation were responded by the central leadership or adopted by the General Office CPC and State Council; submitted 75 issues of *Strategic Research Reference* and 47 issues of *Research Report*; and received 85 pieces of responses from the leadership.

CASTED participated in the preparation of the report on *Progress of Coronavirus Traceability* for submission to the central leadership; drafted the research report of *Study on the China's National Situation of Science, Technology and Innovation* for submission to the central leadership; and completed the special report of *Research on National Innovation System*.

3.2 Achievements of social influence

In 2020, the publications and achievements of CASTED included: *National Innovation Index Report 2020*, *Evaluation Report on Innovation in China's Enterprises 2019*, *Monitoring Report on Innovation Capacity of Chinese Regions 2020*, *Evaluation Report on Science and Technology Innovation of Chinese Regions 2020*, *China-CEEC Science and Technology Innovation Scorecard*, *China Venture Capital Development Report 2020*, *Annual Report on the New-Generation of Artificial Intelligence Development in China 2020* and *Annual Observations on China's Technology Finance Ecology 2020*.



3.3 Achievements of academic influence

CASTED published 18 academic monographs, including *The Great Conversion: 20 Years of Systematic Reform of Chinese Research Institutions*, *The Innovation Path of Chinese Enterprises: Practices with Chinese Characteristics and Policy Evolution*; and completed the translation and publication of the Chinese version of *Frascati Manual* (7th edition) and *Oslo Manual* (4th edition). These academic publications attracted wide attention from the society.

A total of 142 articles were published on various journals, including *Computational Social Science – Origin, Changes and Challenges* on *Chinese Social Science Digest*; *Research on the Setup and Development Path of China's Science and Technology Intelligence Capability System in the New Era* on *Intelligence Theory and Practice*; *Technology Decoupling between China and the United States from the Perspective of Global Value Chain: Causes, Trends and Countermeasures*, *Socialized Service System of Agricultural Science and Technology: Connotation, Composition and Development* and *Motivation, Risks and Countermeasures of Financial Technology Development of Brokerage Companies on China SciTechnology Business*; *Research Progress and Development Trends of Materials Genome Technology* on *Advances in Materials Science and Engineering*; and *Data Access as a Big Competitive Advantage: Evidence from China's Car-Hailing Platforms* on *Data Technologies and Applications*, etc.

3.4 Media

During the window period of major conferences and events such as the 5th Plenary Session of the 19th Central Committee and the Symposium of Scientists, CASTED published an article entitled "China's Scientific and Technological Innovation Achieves Historic Leap" in the Theoretical Communication column of the Qiushi website; published 28 articles on S&T self-reliance and self-improvement, China-US S&T relations, biosecurity, etc.; and was interviewed by mainstream media such as *Guangming Daily*, *Science and Technology Daily* for more than 10 times.

International Exchanges and Cooperation

4.1 Expansion and development of institutional cooperation

Co-organized the "2nd China-US STI Think Tank Dialogue Series" with US think tanks

To enhance mutual trust between China and the US, on the basis of the 1st China-US STI Think Tank Dialogue Series co-hosted with the US side in October 2019, CASTED co-organized with the Center for Strategic and International Studies (CSIS) the 2nd China-US STI Think Tank Dialogue Series. From August to December 2020, the two sides held monthly online sessions. With more than 10 experts from each side to attend each session, the Dialogue discussed five topics in total: "Innovation Capacity and Innovation Trends", "Industrial Policy", "5G", "Export Control", and "Prospect on Pandemic and China-US Relationship". The reports from these sessions were responded by the central leadership.



Co-organized the "5th Sino-UK Innovation & Development Forum" with Oxford University, etc.

With the theme of "Sino-UK STI Cooperation in the Post-Pandemic Era", experts from Oxford University, Department for Business, Energy and Industrial Strategy (BEIS), University of Sussex, Institutes of Science and Development under Chinese Academy of Sciences (CASISD), Tsinghua University, Zhejiang University, etc. discussed the ideas and opportunities for S&T cooperation between China and UK.

Co-organized the 15th China-Japan-ROK Seminar on Science and Technology Policies with relevant Japanese and Korean institutions

Focusing on the five topics of "Innovation Development Policy and Management", "Green Stimulus for Inclusive Growth", "New Dynamics of Economic Growth", "New Trends in Science and Technology Foresight and Development", and "Science and Technology Cooperation after the Covid-19 Pandemic", leaders and experts from CASTED, CASISD, National Institute of Science and Technology Policy of Japan, Science and Technology Policy Institute of South Korea, Korea Institute of Science & Technology Evaluation and Planning, etc. delivered reports, carried out panel discussions and shared the latest developments on S&T strategies and policies of China, Japan and South Korea.

Led the establishment of the "Belt and Road" Network of Science and Technology Think Tanks and held related seminars

During the 2020 Pujiang Innovation Forum, CASTED held a symposium and invited experts from countries along the "Belt and Road", including Pakistan, Israel, Singapore and Thailand, to discuss topics such as S&T cooperation, the impact of the pandemic and information technology development; and signed a framework agreement with Pakistan, Thailand, Serbia, Egypt, etc. for the "Belt and Road" Network of Science and Technology Think Tanks.



Co-organized the Seminar on Global Innovation Index 2020 with the World Intellectual Property Organization

More than a thousand IP experts from countries around the world attended the seminar, and President Hu Zhijian gave a keynote speech to share China's achievements in the field.

4.2 Enhancement of international cooperative research and academic exchanges

Conducted extensive cooperative research around the world

CASTED undertook research on the AI development strategy of Serbia and drafted the *Strategy for the Development of AI Application Capabilities from 2020 to 2030* for Serbia, which was responded by the central leadership; held a seminar with the Norwegian FAFO Institute on the "Development and Living Conditions of the Western Region"; and completed the project on "China's Support Policy for Livelihood Technology and China-Korea S&T Cooperation Program".

Actively participated in international academic exchanges

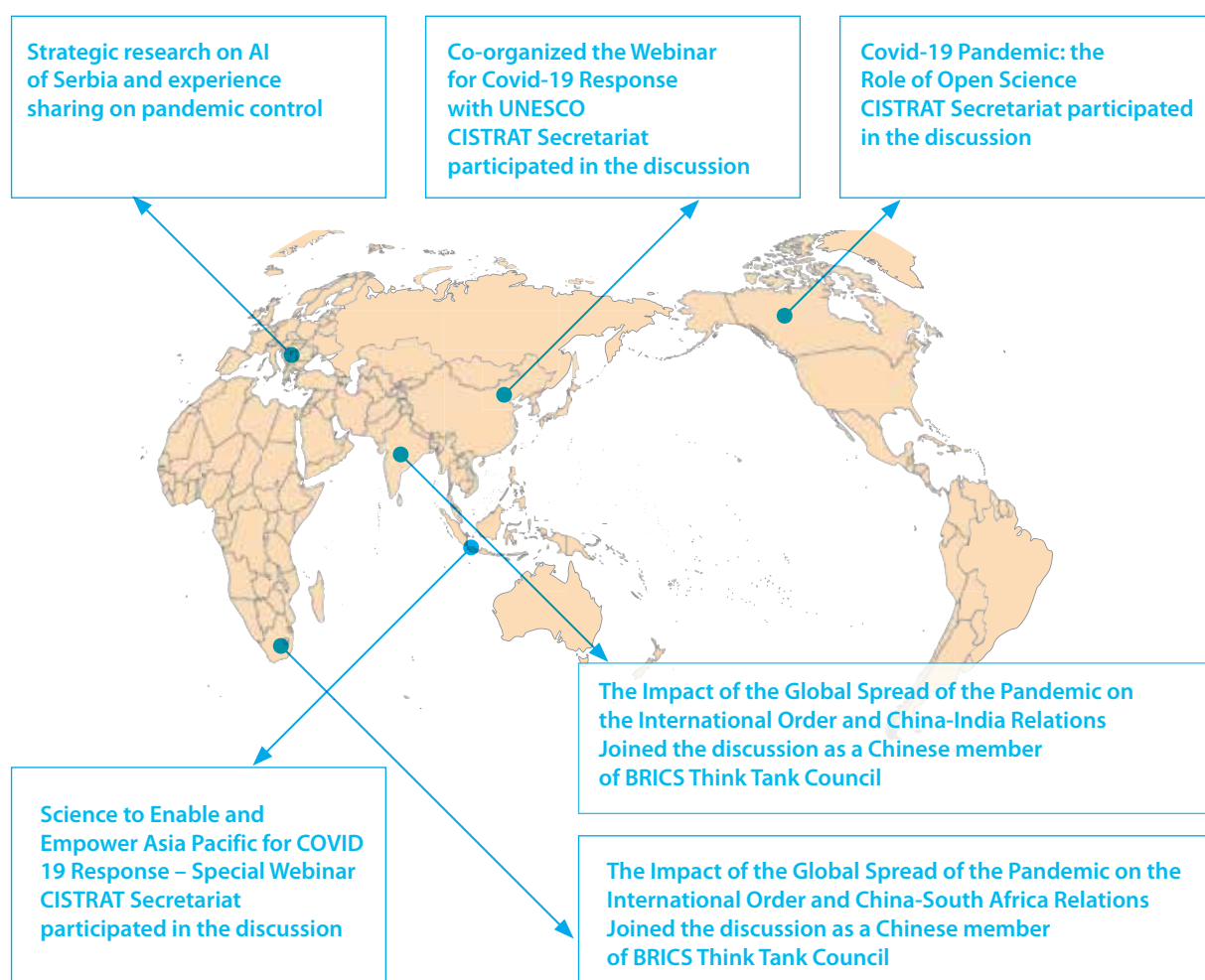
CASTED participated in the 12th BRICS Academic Forum with a keynote speech -- "Ensuring Inclusive Growth and Sustainable Development to Benefit from Digitalization -- China's Inclusive Innovation Practices", the 3rd BRICS Think Tank Cooperation Seminar, Cloud Forum of the "Belt and Road" Think Tank Cooperation Alliance, and other international exchanges.



4.3 Responsible performance of CISTRAT

2020 marks the 8th year of International Research and Training Center for Science and Technology Strategy (CISTRAT) under the auspices of UNESCO. The agreement with UNESCO was renewed and experts gave high marks to CISTRAT's work.

CISTRAT has been actively involved in international response to the pandemic by cooperating with UNESCO to hold the Webinar for Covid-19 Response and participating in international exchanges to share China's experience, such as the Science to Enable and Empower Asia Pacific for COVID 19 Response – Special Webinar.



PART V

Research Network and Collaboration

5.1 Research cooperation with domestic think tanks

Cooperation mechanism with renowned think tanks

CASTED signed cooperation agreements with institutions such as CASISD, Center for Strategy Studies under Chinese Academy of Engineering and Great Wall Strategy Consultants to explore more cooperation possibilities and constantly improve cooperation mechanism.



Extensive research cooperation

In collaboration with universities such as Tsinghua University, Renmin University of China, Beijing University of Aeronautics and Astronautics, Central University of Finance and Economics and Ocean University of China, research institutes such as Chinese Academy of Sciences and China National Institute of Standardization, and private think tanks such as Elsevier, Beijing Great Wall Strategy Consultants and Clarivate Analytics, CASTED completed 19 research projects, including: "Research on Challenges and Countermeasures for China's Science and Technology Development in the New Pattern of China-US Relations", "Research on Socialized and Diversified Resource Allocation Mechanism for Basic Research", "Research on Next-Generation Information Technology to Support Modernization of Governance System and Capacity"; and drafted research reports including *New Mode of International Science and Technology Innovation Cooperation in the 14th Five-Year Plan Period*, *China's Path and Catch-up Strategy to Accelerate the Development to a World Science and Technology Power*, etc.

CASTED also cooperated with Shanghai Municipal Government Research Center, Shenzhen Municipal Government Research Center, Shanghai Institute for Science of Science, Zhejiang Institute of Science and Technology Development Strategy, Jiangsu Institute of Strategy and Development, etc. to carry out research projects to share research achievements, including "Science and Technology Innovation Governance System for Shanghai", "Practices of Science and Technology Innovation Governance System at Home and Abroad", "Strategies for the Introduction of International Science and Technology Organizations", etc.

5.2 Co-organization of academic events

As the supporting organization of the Academic Committee of Pujiang Innovation Forum, CASTED organized the theme design of the 2021 Pujiang Innovation Forum, hosted the Policy Sub-Forum and the "Belt and Road International Symposium", and compiled the outcomes of the 2020 Pujiang Innovation Forum.



CASTED co-organized with Beijing Academy of Science and Technology the "Zhongguancun Parallel Forum - Global Science and Technology Innovation Think Tank Forum". Liang Yingda, the Party Secretary of CASTED, presided over the keynote report session.



Together with institutes such as Shanghai Institute for Science of Science, CASTED organized the "15th National Symposium on Technology Foresight" in Gansu. Vice President Sun Fuquan and other researchers from CASTED delivered a series of keynote reports on topics such as "Technology Foresight", "'Belt and Road' International Science and Technology Innovation Cooperation" and "Scenario Innovation".



CASTED participated in the organization of and exchanged views at conferences such as the Sociology of Science Forum at the 2020 Annual Academic Conference of the Chinese Sociological Association, the Workshop on Global Science and Technology Innovation Governance and Technology Migration System, and the International Forum on Transformation and Innovation Policy at the 16th Annual Academic Conference on China's Science and Technology Policy and Management.

5.3 Communication at training sessions

CASTED held the first Science and Technology Think Tank Training Course in Lianyungang. The session invited nationally renowned experts for speeches and had more than 80 participants from all over the country to attend, promoting the research exchange of think tanks and the development of S&T think tanks around the country.



Experts from CASTED were invited for training and exchanges around the country for more than 40 times. For example, President Hu Zhijian was invited to give an academic presentation in Chengdu and Vice President Sun Fuquan was invited for a training in Inner Mongolia.



6.1 Disciplinary features

Major research fields:

Research on key issues such as national innovation-driven development, STI development planning, nurturing of new dynamics, international STI cooperation, building of the "Belt and Road" innovation path and transformation of S&T achievements.

1

Research on the theoretical and policy issues regarding the combination and interaction between STI with Chinese characteristics and financial innovation; tracking of and analysis on the total amount, structure and evolution trend of STI investment (R&D investment); and research on the major issues of China's innovation and entrepreneurship investment and financing system.

5

Research on the major strategic issues regarding national S&T system reform, national innovation system building, innovation governance system and modernization of innovation governance capacity.

2

Research on strategy and planning, innovation policy and management, strategic emerging industries and digital economy development with a focus on industrial innovation, competition and development.

6

Research on national key technology selection, S&T evaluation, key areas and industrial S&T development trends and characteristics, disruptive and non-consensual technologies that affect industrial revolution, and technology roadmaps.

3

Research on regional innovation strategy and planning, development of cities and STI centers, spatial layout and optimization of S&T resources, development of innovative industrial clusters and high-tech parks, rural innovation and entrepreneurship and agricultural competitiveness, as well as poverty alleviation with S&T.

7

Research on theory, method and application of S&T statistics and indicators, as well as theoretical and empirical research on the building of innovation investigation system.

4

Research on the relationship between STI and social development, including S&T ethics, S&T governance, and S&T talents.

8

6.2 Research team

By December 2020, CASTED had 130 permanent employees, 82 with postgraduate degrees or above (63 PhDs), accounting for 63% of all employees. There are 60 cadres with senior professional and technical qualifications, accounting for about 85% of the research staff. It engaged two experts from Europe and received 7 visiting research fellows from other domestic S&T think tanks.

Driven by major research tasks, CASTED gradually built more than 10 special research teams in STI strategy and planning, innovation system and institutional reform, S&T talents, rural S&T, industrial technology innovation, technology finance and taxation, regional innovation, S&T ethics and innovation culture, technology forecasting, STI monitoring, etc.

In order to deeply study the world's S&T frontier as well as domestic and international development trends, and to meet the needs of major policy-making decisions, CASTED set up special research groups on artificial intelligence, China-US S&T relations, and the Covid-19 pandemic to concentrate efforts on these special projects while exploring a new mode of teamwork research.

6.3 Postdoctoral development

The postdoctoral research center has reinforced the foundation of daily management, and has seen remarkable results in the achievement quality improvement for brand building as well as foreign cooperation and exchange.

1. In the comprehensive evaluation of postdoctoral programs of 2020 organized by the Ministry of Human Resources and Social Security and Administration of Post-Doctoral Researchers, the postdoctoral research center of CASTED was awarded the National Outstanding Post-Doctoral Research Center.

2. The postdoctoral research center received funding from the international exchange program of "Sino-German Postdoctoral Exchange Program". This exchange program is the center's first successful application for international project funding since its establishment. CASTED's project is the only soft science project selected into this program in 2020, and it is also the only postdoctoral research center that got into the program among all participants.

3. The doctoral research center planned and hosted the "First Session of Postdoctoral Joint Forum", whose membership covers Shanghai Institute for Science of Science, National Center for Science and Technology Evaluation under Ministry of Science and Technology and Torch Center under Ministry of Science and Technology.



PART VII Cultural Building

Spiritual
building

Cohesion
building



Thematic activity -- "May in Mount Jiu, Youth in China".



The special research team of "Roots in the Grassroots" visited Memorial Hall of the Victims in Nanjing Massacre by Japanese Invaders.

Sitcom performance of "How Lazy Yangyang Turned to Be the Hero of Pig Expert" at the reunion event of the Ministry of Science and Technology, which used an artistic approach to tell a wonderful story about how the poverty alleviation officials of the Ministry of Science and Technology stimulate the vitality of innovation and entrepreneurship in poverty areas and help the people get rid of poverty.



2020 Spring Festival Event at CASTED

Body building



Participation in the MOST staff badminton competition.



Participation in the MOST staff tennis table competition.



Hiking activities at Yanxi Lake, etc.

CASTED organizes visits to and prepares holiday gifts for the old officials and retirees every year, providing various benefits and quality services. On International Women's Day, CASTED would purchase moxibustion cushions and herbal incense bags for official and employees, which can help guard against epidemic and virus, expel coldness in the body and maintain health.

On Children's Day, CASTED bought gifts and provided photography services for the employees' children of different ages and genders.



Trips for retired cadres to visit the Grand Canal River Park and Nanhaizi Park.

Charity activities of "Everlasting Love - One Million Families Connected by Love" to provide help for children in the mountainous area.



Donation campaign to Covid-19 pandemic control, which was joined by 127 staff.

Publication

With journals of *Forum on Science and Technology in China* and *China SciTechnology Business* as the platform, CASTED has been continuously raising the influence of think tank research in the field of S&T strategy and innovation.



Forum on Science and Technology in China

- Focusing on academic frontiers and theoretical development, it provides academic and theoretical support for the development of science and technology think tanks.
- It has always been the source journal of Chinese Social Science Citation Index (CSSCI), core Chinese journal of Peking University, AMI core journal of the Comprehensive Evaluation of Chinese Humanities and Social Sciences, RCCSE Chinese core academic journal (A), and statistical source journal of Chinese science and technology papers.



China SciTechnology Business

Focusing on issues regarding STI strategy, policy and management at home and abroad, it is the leading media for promoting the achievements of national S&T think tanks.



WeChat official account
of *Forum on Science and
Technology in China*



WeChat official account
of *China SciTechnology
Business*

Associations

2 national associations

China Federation of Scientific and Technological Institutes

Established in 1987, China Federation of Scientific and Technological Institutes aims to unite and liaise with scientific and technological institutes and researchers nationwide to carry out exchanges and research activities on the reform, development and management of scientific research institutions. In April 2020, the Federation organized member institutes to share experience and exchange materials on pandemic control. In October, it held the 4th Executive Board Meeting of the 5th Session in Beijing. In November, it held the 20th Report Session and Council Meeting on S&T Development and Reform in Beijing.

China Society for Science and Technology Indicators

Established in 1995, China Society for Science and Technology Indicators has played an active role in promoting the research and application of S&T indicators for management and decision-making. In September 2020, it released the series of reports of *China Science and Technology Indicators*. In December, it organized a national training course on the basics of S&T statistics and innovation surveys for personnel responsible for S&T statistics in relevant departments.

WeChat Official Account

The WeChat official account of "Chinese Academy of Science and Technology for Development" was established to gather ideas and insights regarding STI. Since its launch, the number of visits and followers has been continuously increasing. As the official online publicity platform of CASTED, it regularly publishes research reports, expert views, academic news and S&T policies, providing a new channel for the development and publicity of China Top Think Tanks.

Young CASTED is a WeChat public platform for the convergence and exchange of ideas among the youth representatives of CASTED, which regularly publishes group activities of these young members, providing a communication platform for young talents of CASTED.





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