

PROJECT DOCUMENT  
CHINA

**Project Title:** UNDP SDGs Innovation Pilot Project

**Project Number:** 111702

**National Implementing Partner:** China International Centre for Economic & Technical Exchanges (CICETE)

**Project Responsible Party:** Chengdu Hi-Tech Industrial Development Zone Management Committee (CDHTMC)

**Supporting Agency:** Department of International Cooperation, Ministry of Science and Technology of the People's Republic of China (MOST)


**Start Date:** December 2019      **End Date:** November 2024

**PAC Meeting Date:** 12<sup>th</sup> of Dec 2018

Brief Description			
<p>The purpose of the project is to strengthen the capability of Chengdu Hi-tech Zone to unleash its future development momentum based on innovation and sustainability, to promote the transformation of its development path from productivity-driven to innovation-driven, and to actively explore international cooperation of high-tech zones with Chengdu Hi-tech Zone as the pilot. By convening the private sector, academia, investment community, innovation community and public administration into the interactive process of mutual learning and knowledge sharing, forces can be gathered to jointly advocate and promote the international innovation practices of high-tech zones and international cooperation on sustainable investment guided by the principles of sustainable development. The project is also committed to promoting South-South cooperation and exchanges with other countries leveraging UNDP's global network resources and sustainable development experience to establish an international cooperation platform of global high-tech zones with Chengdu Hi-tech Zone as its pilot.</p>			
<p><b>Contributing Outcome:</b> UNDAF CPD 2016-2020 Outcome 1: Growth and development are inclusive and sustainable, incorporating productive</p>	Total Resource Required:	USD 5,010,000	
	Total	UNDP TRAC	USD 10,000

capacities that create employment and livelihoods for the poor and excluded.	Resource Allocated:	Government Cost-Sharing	USD 5,000,000
		In-kind	

Agreed by (Signatures):

China International Centre for Economic & Technical Exchanges (CICETE)	United Nations Development Programme (UNDP)	Chengdu Hi-Tech Industrial Development Zone Management Committee (CDHTMC)
Signature: 	Signature: 	Signature: 
Date: 25 Dec 2019	Date: 25 Dec 2019	Date: 25 Dec 2019

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## **SECTION I. RATIONALE AND STRATEGY**

### **Part I. Background**

#### **Part 1.1 Situation Analysis**

##### **1.1.1 Global Context for Innovation-based Development**

Globally, the unprecedented speed of science and technological change and its depth and breadth are having major impacts on billions of people's lives in both developed and developing countries. The transformation in manufacturing is marked by "Industry 4.0", or the fourth industrial revolution, characterized by artificial intelligence, the internet of things, and cloud storage and computing. Green technologies such as clean power supply and next generation battery storage, are helping to improve the efficiency of energy use and reducing greenhouse gas emissions. Other advances including 5G mobile networks, biomechanical, genomic and robotic technologies are seeding "smart" industries that are promising to spur a new round of economic growth worldwide.

In such a context, policy makers have become increasingly aware of the role of innovation in sustainable development and have been actively seeking pathways to facilitate innovation-driven development. In many developed countries, governments have established mature national innovation systems and respective policies with the focus on supporting basic research, promoting diffusion of scientific and technological outcomes, and encouraging bottom-up innovations to take better advantage of emerging technologies. These policy breakthroughs help to push forward the frontiers of human knowledge, reshape traditional businesses management and administration models, and pull together the private sector, academia and public administration in an iterative process of mutual learning, and knowledge sharing.

##### **1.1.2 Science, Technology and Innovation (STI) in China**

Science and technology are considered as the primary engine of economic development in China and great efforts have been made in promoting technology absorption and diffusion. The approach has supported China's rapid economic

growth and transformation over the last few decades, with remarkable achievements in several key sectors where China is leading the global innovation frontier, e.g. high-speed trains, e-commerce and mobile payment methods. In line with the ambitious plans as outlined in the Made in China 2025 plan, China needs to strive to improve both the quantity and quality of growth and become a leading global power in innovation. A major task hence is to strengthen the existing innovation system in China and enhance the efficiency in translating innovation inputs and outputs to productivity growth.

China's National Innovation System (NIS) was initiated in the mid-1990s.<sup>1</sup> The 10<sup>th</sup> National Development Plan (2001-2005) outlined the strategy of "building national innovation system", through "establishing national knowledge innovation system, and promoting knowledge Innovation project". The plan was followed by the National Medium-and Long-term Science and Technology Development Planning Framework (2006-2020), which set forth specific targets and underscored the guiding role of science and technology in economic and social development. To accelerate the construction of the innovation system, the State Council put forward "*Opinions on Deepening the Reform for Science and Technology System and Speeding up the Construction of National Innovation System*" in 2012. The 19th CPC National Congress report further confirmed the pathway and identified future directions and measures for making China an innovative nation.

At the implementation level, central and provincial governments promote STI mainly through financial instruments, e.g. tax credits, matching funds, government procurement programs, followed by other policy interventions such as technology extension services, science parks, incubators and accelerators. Most policies are targeted at high-tech firms, start-ups, as well as micro and small firms, with a focus on transformation of STI outputs, reinforcing intellectual property rights, and cultivating innovative talents.

As an input to the NIS, public spending on science and technology innovation and R&D have grown rapidly from RMB 5 trillion in 2007 to RMB 18.7 trillion in 2016. China's spending on R&D alone is now second only to that of the United States in absolute numbers, and is estimated to have accounted for about 20 percent of global R&D spending in 2017.<sup>2</sup> In terms of distribution, the majority of China's R&D

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<sup>1</sup> "In the era of knowledge economy, to build the national innovation system" 《迎接知识经济时代，建设国家创新体系》；1995

<sup>2</sup> Source: World Bank.

spending goes to ICT producers, followed by automobiles and transport, as well as ICT services, reflecting China's different positioning as compared to OECD countries in global value chains and comparative advantages in these areas.

The investments in innovation have yielded encouraging outputs. The WIPO/INSEAD/Cornell Global Innovation Index for 2016 shows China moving up from 29th to 25th place.<sup>3</sup> According to the Ministry of Science and Technology (MOST), the contribution rate of China's scientific and technological advances in economic growth has reached 56.2% as of 2017. China also performs well in the number of patents produced.

The top-down structure and funding preference (biased in favor of SOEs) of China's national and regional innovation systems results in a mixed impact of public spending on innovation. Data shows that disparities are wide and innovation density seems to be higher in a few regions, mostly in mega cities and coastal areas. That said, the impact of R&D spending appears to have been higher in China's poorer regions and in private sector firms, suggesting potential for these regions/entity to reap the benefits of STI in leapfrogged development.

### 1.1.3 Science and Technology Initiatives in Chengdu

Chengdu is an important city in Southwest China connecting the Belt and Road Initiative with the Yangtze River Economic Belt. Designated as a comprehensive innovation reform pilot zone, a national independent innovation demonstration zone, and an inland pilot free trade zone, Chengdu is on its way to become an economic, scientific, technological, financial, cultural exchange and innovative centre in western China, as well as a transport and communications hub. Its rapid development has benefited more than 300 million people in the western region. Chengdu is speeding up the building of a modern and open industrial system underpinned by advanced manufacturing industry, modern service industry and new economy. By 2020, its electronic information industry, machinery manufacturing industry and bio-pharmaceutical industry will each generate trillions of yuan; its convention and exhibition industry, financial services industry, modern logistics industry, cultural tourism industry, and life services industry will each generate hundreds of billions of yuan. Chengdu recently published "The Implementation Plan of Promoting the Development of Digital Economy in Chengdu", where the city set the target of achieving an economic scale of a total volume of 300 billion RMB by 2022. Chengdu has built a comprehensive system to support innovation and entrepreneurship talent development, including various innovation cultivation systems to promote the

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<sup>3</sup> WIPO/INSEAD 2016. [http://www.wipo.int/edocs/pubdocs/en/wipo\\_pub\\_gii\\_2016.pdf](http://www.wipo.int/edocs/pubdocs/en/wipo_pub_gii_2016.pdf).

transformation of the advantages of talents and STI resources into the industrial upgrading and economic advantage.

The Chengdu Hi-Tech Industrial Development Zone was set up in 1988, and was designated as one of the first batch of the state-level hi-tech development zones in China in 1991. In 2006, it was designated by the MOST as a pilot “world-class high-tech zone”. In 2015, it was designated by the State Council as the first National Independent Innovation Demonstration Zone in western China, and became the core zone of the comprehensive innovation reform pilot zone and the pilot free trade zone in Sichuan Province. Its pillar industries include the electronic information industry dominated by integrated circuits, optoelectronic display, intelligent terminals, etc.; the bio-pharmaceutical industry characterized by biotechnology medicines, new chemical agents, modern Chinese medicine, high-performance medical devices, etc.; new economic industry focuses on 5G communication and artificial intelligence, network audio-visual and digital literature, big data and network security. In 2018, the Gross Regional Domestic Product (GRDP) reached 187.77 billion RMB, an increase of 9.6 percent, accounting for 12.2 percent of Chengdu's total GDP; its total import and export volume reached 337.82 billion RMB, accounting for 52 percent of the province's total; the number of unicorn companies in Chengdu grew from zero to three; 69 enterprises made the list of the Top 100 Chengdu New Economic Enterprises. Chengdu has become one of the most influential high-tech zones in China.

## 1.2 Challenges

As national innovation strategies provide ground-rules and a large part of the financing for innovation, cities like Chengdu strive to develop its own capacity as a regional innovation hub, and complement national initiatives by crafting its own policies to foster innovation. As a subset of the national innovation system, the priority tasks for Chengdu are to spearhead its own comparative advantages, create a context-specific environment that fosters local knowledge creation and exchange, and establish a place where innovation activities are concentrated and networked to scale up, generate spillovers, and a surplus in resources. Other than developing special economic zones, as has been done in other “innovation” cities, Chengdu needs to find its own path that is conducive to form socially and commercially viable innovation ecosystems. However, Chengdu faces a series of challenges in advancing its own innovation-based development agenda, which, if left unchecked, may impair the city's ability to catch up with other innovation pioneering cities in China and the world, and slow down its pace in achieving the targets it set for building its new economy and balanced development models.

### 1.2.1 Gaps in Human Capital

Similar to other Chinese cities, Chengdu adopted four main approaches of talent cultivation: university based, project based, talent cultivation cooperation and regional cooperation. Taken into consideration multiple factors such as time frame, required resources, potential for scale-up, and reliability, the project-based model, or more well-known as the Industry-Academia-Research integration approach, is widely promoted to unleash the innovation potential of academia and accelerate transformation of innovative ideas to market.

Despite the recent progress in cultivating innovative talents, Chengdu stills lags in high-quality human capital. The initiatives such as the Science & Technology Industrial Park, corporate incubators, and research centres have continuously contributed to cultivating local innovation talents. However, Chengdu has yet to see a strong technology-centred, market-oriented model that could continuously concentrate innovation talents and lead cluster development as seen in Silicon Valley and other successful innovation cities in the world.

Compared to other outbound regional economies, and as an inland city in western China, Chengdu lacks regular channels to link to and interact with the international markets and opportunities, which limit the ability of local talents and entrepreneurs to learn, share, exchange with and benefit from broader global and regional innovation development.

### 1.2.2 Imbalanced and Insufficient Technology Diffusion

The private sector plays a major role and has developed strong capacities in technology diffusion mainly through acquiring advanced technology and moving up the product value chain. The technology diffusion in China, however, is characterized by a long tail with a few lead companies taking much of the technological advances while most firms lag behind. The average technology adoption rate is much lower as compared to that in OECD countries as well as in frontier Chinese cities such as Beijing, Shanghai and Shenzhen. There is a need to flatten China's diffusion curve by accelerating the rate of advanced technologies throughout the distribution of firms. In other words, better mechanisms need to be put in place to facilitate the diffusion of technologies among firms that lag behind in adopting advanced technology, e.g. SMEs, helping to upgrade their capabilities and improve the effectiveness of technology diffusion.



Meanwhile, China is becoming a provider of development knowledge and technologies through South-South cooperation frameworks and trilateral partnerships. Much of China's development technologies and know-how, though not necessarily pushing forward the frontier of science and research, were successfully applied to solve practical problems arising in early-to-mid stages of development, with minimum entry barriers and do not require strong absorbing capabilities.

The innovations, often in the forms of improved products and services, new or adapted business processes and models, as well as improved organizational and managerial practices, have proven to be better suited for the local development context, and are known for addressing local problems with relatively lower costs. Governments, institutions and enterprises especially those at regional and local levels are important reservoirs of such STI. Nevertheless, there is a lack of efforts in systematically collecting and analysing the knowledge, and serious a gap remains in matching available resources (innovation expertise, knowledge and technologies) with development needs, resulting in missed opportunities to maximize the utility of technologies and innovations.

### 1.2.3 Efficiency in Harnessing STI for Socio-economic Development

Over the past decades, it is an indisputable fact that science, technology, and innovation play a central role in human development. Rapid advances in science and technology have made significant contributions in promoting the implementation of sustainable development strategies. However, despite the availability of a vast body of scientific and technological knowledge and innovation that is directly relevant to many areas of sustainable development, there is not yet an effective system to deliberately guide and facilitate the identification, assessment and application of STI to address social development challenges such as poverty, gender disparity and environmental degradation. Issues attributable to the problem include: i) inadequate capacity to help inform policy and inspire STI-based development solutions; ii) ineffective mechanisms that mobilize bottom-up innovations with the participation of local communities, indigenous people, SMEs, universities and the general public; and iii) insufficient efforts in promoting collaborative research, cross-disciplinary innovations and interaction between researchers, policy makers and development practitioners. In today's world where ICT advances have made it far easier to network, collaborate, and crowd-source, the lack of an "open" innovation system becomes a barrier in unleashing the creativity and potential of individuals, communities, and public and private institutions in addressing social development challenges,

On the other hand, as the world celebrates the progress of STI in advancing global development, attention is increasingly being paid to the hidden risks, costs and potential impact of under-regulated technologies that may damage privacy, security, and ethics central to human livelihood. Recent privacy scandals in some social media platforms ignited concerns over massive data collection and usage, and served as a wake-up call for more structural assessment and robust regulation of emerging technologies. However, limited efforts are being made in China to deepen the understanding on unintended consequences as well as trade-offs of applying STI, especially the impact on local businesses, low-income jobs and indigenous livelihoods. A new innovation governance structure needs to be established with better knowledge of such impact, more transparent procedures and rules, and clearer ownership and participation mechanisms built in to ensure sustainable development for all, including those who may lag behind in the data economy.

A case study done by the World Bank provided insights on the role of innovation ecosystems and identified multiple components that support the practice of innovation in both public and private sectors: policy, finance, culture, support structures, R&D, human capital, and markets. Effective transformation of STI requires comprehensive assessments of these factors, safeguarding supports from a variety of sources (e.g. governmental, industrial, academic and international) and developing fit-to-context roadmaps for technology adoption with appropriate monitoring and evaluation mechanisms to understand the impact and how to improve the efficiency in using STI to address social and economic development issues.

### **Part 1.3 UNDP's Innovation Strategy**

UNDP's Strategic Plan (2018-2021) focuses on exploring new ways of doing business through a process of idea generation at the country and regional levels, business case development, testing, iterative improvement and scaling up or down when feasible. Managing the knowledge that emerges through this work – including the expertise developed and how to source it – will be critical to the success of the innovation stream. As described in the Strategic Plan, innovation labs will be a mechanism through which ideas are surfaced and developed, with different country offices or units taking the lead based on their expertise on the issue and ability to carry the work forward.

In 2014, UNDP established the Global Innovation Facility to foster the design of a new generation of development services by testing promising concepts, methods

and emerging technologies. From Innovation Labs to improve public service delivery to foresight-based techniques that enhance planning processes; from real-time information that improves decision-making to behavioural insights and random control trials (RCTs) that help design more effective policies based on robust evaluations, UNDP's geographic reach, field presence and understanding of the local contexts, has allowed the organization to experiment with different innovation methods quickly and maximize the learning from those interventions that can be scaled up, meanwhile contribute to de-risking investment of public funds.

Over the past few years, UNDP supported 13 Innovation Labs (of which 6 are co-hosted with Governments) across 5 regions to shape the next generation of public services through the UNDP Innovation Facility. 6 are co-hosted with Governments (including city/local), 7 by UNDP Country Offices in partnership with the private sector and academia. Innovation labs bring diverse actors together to generate ideas, build prototypes and test solutions to development issues. In response to dynamic and often challenging development contexts, UNDP embraced agile programming and identified innovation as one of the key priorities for achieving transformational development change and for designing a new generation of development services that would support increasingly sophisticated national governments in tackling complex challenges they are facing.

Building upon the successes of the initial Innovation Labs, in 2019 UNDP launched the SDG Accelerator Lab Network, creating the world's largest, fastest learning network to accelerate sustainable development. The network established 60 Accelerator Labs serving 78 countries. 27 of these labs are located in Least Developed Countries, and a significant number in fragile and conflict-affected states. These 60 nodes significantly speed up the rate of knowledge sharing and learning amongst UNDP offices and partner governments.

UNDP also has several initiatives on SDG financing. At the country level, UNDP is working with the Chinese government to promote the establishment of a platform by leveraging UNDP's global impact with standard and evaluation framework for the systematic sustainable development of China. The platform will be used by stakeholders in China to develop pipeline projects that can ensure the balance between SDG impact and economic feasibility which is legitimate for SDG Finance. It will focus on convening an ecosystem, generating research and collecting evidence on measurement systems, financing instruments, guidance/principles, and regulatory frameworks to scale SDG aligned finance and investment. The SDG Finance Platform in China is developing an SDG Finance Taxonomy and Impact Management Matrix to select and screen SDG aligned finance projects, and measure and report the impact that those capital generate.

At the regional level, the SDG Innovative Finance (UNSIF), established in November 2016, is an effort by UNDP to promote sustainable investment around the globe. It aims to bring together the public and private sector, foster more capital, technology and talents into the implementation of the SDGs, and create financial, environmental and social returns. UNSIF focuses on the Asia Pacific region, and has piloted various initiatives in a few countries, e.g., setting up sustainable business incubators and accelerators, facilitating cooperation on sustainable development, building up networks and platforms for sustainable investment, and setting guidance for asset owners to raise awareness of sustainable investment and practices.

At the global level, UNDP has set up the SDG Impact, a flagship initiative focusing on generating and leveraging private sector capital in delivering the Sustainable Development Goals (SDGs). The project has developed a set of global standards for how investors and enterprises manage and measure their impacts on the SDGs (SDG Impact Practice Standards). SDG Impact will facilitate public-private policy dialogues and investor forums to increase SDG enabling and aligned private sector investments in the country.

The project will leverage UNDP's regional and global initiatives and capacities to help the Chengdu Hi-tech Zone build up a sustainable investment ecosystem based on its own strengths, e.g., establishing an incubator emphasizing the promotion of sustainable development, involving experts worldwide to provide technical advisory, experience sharing, or strategic partnership building.

## **Part 2. Strategy**

To address the development challenges articulated above, the project strategy consists of three seminal components:

1. Leverage China's capabilities on innovation particularly that of Chengdu Hi-tech Zone, and UNDP's global network and experience in innovation-based development; to facilitate South-South exchange between China and other developing countries and beyond focused on innovation for development.
2. Establish a National Innovation Platform in Chengdu Hi-tech Zone, which amongst its many roles, will serve as a co-creation space for governments, civil society, UN, academia and the private sector to seek solutions to major

development challenges; build up capacity of government and development practitioners in designing and implementing integrated innovation strategies; and promote exchange and research on STI topics.

3. Build up the China-Europe and China-ASEAN Platforms for Cooperation on sustainable investment, establish an incubator with the priority of promoting sustainable development by High-tech enterprises, and involve experts around the globe in providing technical support and experience-sharing.

Under the strategic guidance of MOST and MOFCOM, the project will contribute to national priorities in accelerating the building of an innovative country, deepening science and technology reforms, and contribute to the achievement of the innovation goals by 2020.

UNDP's Regional Innovation Hub, Asia-Pacific and global Innovation Labs, UNSIF team and other stakeholders amongst the innovation and sustainable investment ecosystem are in possession of the rights to utilize the resources provided by the platform, organize events and forums, and review innovation ideas.

## **2.1 Overview of Innovation for Sustainable Development**

The projects will be implemented with the overall principle of utilizing innovation to make advances in achieving the Sustainable Development Goals (SDGs). The SDGs require all countries and all stakeholders to equally ensure social governance, economic inclusion, and environmental protection by 2030. Achieving the SDGs requires the partnership of governments, private sector, civil society and citizens alike, to act domestically and internationally, to ensure we leave a better planet for future generations.

For a growing number of countries, innovation, spurred by technological advances and increased access to global markets, is a leading driver of economic growth and prosperity. New technologies and an appetite for social, economic, and policy reforms are creating new entry points to address the most stubborn development challenges.

Whether it is around technology innovations, alternative finance models or policy experimentation, governments are increasingly realizing that they need to invest in social innovation approaches to better engage with citizens and leverage the growing influence and capacities of the private sector to create the next generation of services and disseminate these services through global partnerships.

Innovation for development is about identifying new and more effective solutions that add value for the people affected by development challenges. Technology plays a major role in this. In addition to new technology applications, innovation for development also means:

- Testing new business models to unlock financing needed to achieve the SDGs;
- Developing the next generation of public services with citizens and governments based on user-centric approaches;
- Building real-time information systems to improve transparent and responsive decision-making; and
- Leveraging behavioural insights to better diagnose development problems and design evidence-based experiments accordingly.

Therefore, the guiding principles of projects will be to utilize STI to address the most difficult challenges of poverty, climate change, resiliency and sustainability with a vision to address gaps in policy, technology and science to catalyse at-scale impacts domestically and replicate successes regionally.

## **2.2 Project Outcomes, Outputs and Key Activities**

In line with the aforementioned objectives and principles, the project is comprised of two components, each corresponding to an intended outcome:

- 1) To enhance the innovation competencies and global perspective of the Chengdu Hi-tech Zone, incorporate the SDGs into the future development plans, and foster the transition from sheer economic outputs to the new driving force of sustainable and inclusive development pathways;
- 2) To build up a platform for international cooperation on connecting Hi-tech zones around the globe, and solicit innovative and expandable solutions for achieving the SDGs. In this regard, an international forum will be hosted to collect the innovative practices of promoting and fostering the internationalization of Hi-tech

zones based on the SDGs, thereby forging Chengdu into a leading city of innovative and sustainable development.

For each component, a series of policy research, capacity development and/or advocacy activities will be conducted through a need-based approach. Based on scientific research and technology deployment, pilot initiatives may further be developed to demonstrate the benefits of the proposed STI. Each component will also include raising public awareness and education on science, technology and innovation through targeted advocacy and demonstration activities. An independent Technical Advisory Group will provide necessary strategic and technical support to key project activities, while working closely with project partners to systematically review, assess and monitor project progress.

The project will be implemented in two stages. The first stage (the first and the second year) will be an exploratory and experimental stage with the emphasis on aggregating UNDP's global innovation networks and resources by setting up the UNDP Innovation Lab, building up the China-Europe cooperation platform for sustainable investment by organizing the international and domestic flagship events with the China-Europe Investment, Trade and Technology Cooperation Fair as its core, strengthening the connectivity and trade cooperation between China and the ASEAN, and improving the cooperation with the ASEAN. The creation of both environmental and social values should be underlined while incubating and accelerating Hi-tech enterprises, so as to foster the establishment and development of the platform for sustainable investment; On the basis of the success and development trajectory of the first stage, global experiences, expertise, know-hows and resources should be leveraged to develop innovative facilities. In line with the review of the first stage, the second stage (from the third year to the fifth year) will focus on the adjustments of outputs and expand the activities which prove to be effective.

This project will also focus on the issue of gender. The project outcomes would hardly be achieved without the full participation of females into the STI. The project will incorporate the gender factor into the mainstreaming strategy to ensure that gender-related issues are among the key components of the formulation, implementation and evaluation of the project. Gender mainstreaming will contribute to achieving necessary institutional and organizational reform, thereby ensuring that gender equality is a continuous commitment.

**Outcome 1: To enhance the innovation competencies and global perspective of the Chengdu Hi-tech Zone, incorporate the SDGs into the future**

**development plans, and foster the transition from sheer economic outputs to the new driving force of sustainable and inclusive development pathways;**

**Output 1 Enhanced government capabilities with focus on high-value-added policy support for innovation and sustainable investment**, the core of which is to foster the diffusion and expansion of STI through targeted competence-building measures, in order to support high-quality decision-making, research, demonstration and publicity.

Optimal public innovation-supporting strategy bears the ability to reduce market failure and lower coordination costs. However, the leverage of relevant institutional competence has long been underestimated. Thereby, the project aims to strengthen the capacity of innovation-supporting institutions (including government entities, academia and international organizations) across four core dimensions:

- Policy design, including the ability to plan and design innovation-support policies, identify market failures and key measures needed to address them;
- Implementation quality, including the development of robust M&E systems and performance incentives that can prove the “value for money” of public investment;
- Policy coherence, especially between government strategies, policies, and instruments, and the coordination among the key institutions;
- Policy consistency and predictability, ensuring that public support policies remain relatively stable and predictable over a period of time.

#### ***Indicative Activities***

- Conduct investigations and surveys on current policies and regulations of STI in national and local settings;
- Evaluate policy mechanisms and their effects related to innovation-based development in Chengdu;
- Review global practices and experience related to the management of innovation-supporting policies in cities;
- Provide suggestions for innovation-friendly laws, regulations, policies and guidelines in Chengdu;
- Organize training workshops on policies, regulations, and technical standards and help set policy priorities for both short- and long-term STI management in Chengdu;



- Summarize industry research and international experiences, build a policy framework and path that would suit the needs of sustainable investment in the South-western region.

## **Output 2 Expanded innovator network to ensure “innovation for all”**

STI human capacity building requires creating a knowledge-based innovative society that utilizes scientific evidence to achieve sustainable development for all. Adequate investment will be made on educational and capacity development programmes for innovation, beyond public and private entities, and aims at facilitating participation in STI by youth, community organizations, and indigenous groups. Meaningful participation of women and marginalized groups could further unleash the potential of individuals, communities and society in creating new jobs, expanding balanced social and economic growth, and accelerating scientific and technological advances in achieving the SDGs for all.

Meanwhile, high-quality managerial practices are emerging as key contributors to firm-level innovation. According to a World Bank survey of 40 countries, Chinese firms’ managerial capabilities are relatively weaker than the global average and are among the less sophisticated in long-term planning and staffing. The project aims to leverage global and local expertise to improve the ability of private sector partners in long-term innovation planning, target setting, monitoring of performance, and deployment of R&D related human resources skills and incentives. The project also strives to strengthen public-private links by working with the government to support the private sector in achieving the improvements, by recommending management initiatives and providing advisory services to help companies implement best management practices.

### ***Indicative Activities:***

- Develop cross-disciplinary capacity building activities (training programmes, study tours and research etc.) targeted at youth groups, social organization and community-based groups;
- Foster the creation and cultivation of a youth innovators community to create a pool of knowledge and experience;
- Sponsor workshops, innovation awards, hackathons, prize challenges or similar events to encourage localized innovation and community participation;
- Organize an annual global innovation conference to facilitate exchange, mutual learning and networking among innovators;

- Organize training sessions related to global best practices and experience in improving innovation management practices for the private sector;
- Investigate the organizing process, planning, monitoring, operation and other management practices of firm-level innovation;
- Provide advisory services to address capacity gaps and help companies, especially seed, start-ups and SMEs implement best practices in innovation management;
- Develop a one-stop-shop of applicable tools and instruments, to incubate and support start-ups with strong focus on social good
- Establish a cooperation and interaction mechanism for sustainable investment in Southwest China, including investors (institutional, individual, foundations), entity operators (including companies, civil society and individual), and intermediates (research, evaluation and educational organizations) to facilitate the construction and development of an ecosystem, initiate in-depth cooperation with Europe and Southeast Asia, promote technology transfer, innovation incubation and cross-border cooperation.

**Outcome Two: To establish and expand the innovation networks for the globe, explore a pathway to internationalization and enhance the motivation for opening up; Explore and foster innovative pathways to internationalization based on SDGs through organizing flagship international activities.**

The overall aim of this component is to assist decision makers and stakeholders in China and South-South cooperation countries in co-creating an enabling “space” with human-centred design, where governments, academics, private sector partners and the public can connect, communicate and collaborate in an open and dynamic network to boost translational change through producing, sharing and disseminating innovative knowledge. The space, in the form of an innovation lab, will also serve as a platform to facilitate technology diffusion; the intersection of science-policy-market will be strengthened through an innovation ecosystem. Effective solution exchange mechanisms to facilitate technology diffusion will be identified, assessed and applied within and beyond nations. More importantly, the space can provide a safe environment to analyse, test-run and demonstrate innovative models, processes and ideas, and prepare stakeholders with the capacities needed to respond to constantly changing technology in the future.

Realizing the importance and rapid growth of sustainable development, the project will provide assistance to the Chengdu Hi-tech Zone to build up the sustainable investment eco-system by leveraging its strengths, e.g. establishing the lab with the

emphasis on fostering sustainable development by Hi-tech enterprises, building up China-Europe platform for sustainable investment, facilitating cooperation and exchange between Chengdu Hi-tech Zone and a global sustainable investment ecosystem. In this regard, UNDP will leverage its regional and global resources to provide support.

### Output 3 Enabling ecosystem conducive to innovation collaboration and leadership

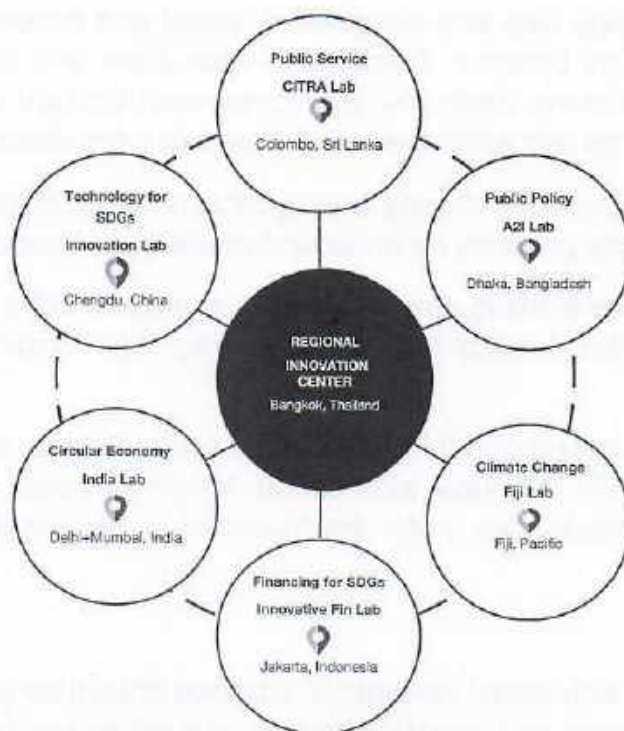


Figure Current UNDP Innovation Labs in the Asia Pacific Region

As one of the UNDP innovation labs in the Asia-Pacific region to be based in Chengdu, the innovation lab will serve as a convening platform that provides integrated support and services to innovation-based development in the city, with the potential to extend such services to other parts of the country as well as the region. Amongst its many roles, the lab will provide a “safe sandbox” space to test and try new solutions; bring together government, civil society, UN, academia and the private sector to co-create solutions to major development challenges; encourage a culture of innovation in the public sector, build up capacity of government and development practitioners; and exchange and research on STI related policy agenda. By providing policy and technical advisory and capacity development as well as communication support, the lab aims at facilitating the sustainable translation of innovation results and demonstrating added value of innovation and technology in identified development areas.

### ***Indicative activities:***

- Launch an innovation lab in Chengdu Hi-tech Zone in collaboration with multi-stakeholders from the government, academia, and international organizations;
- Set up a Technical Advisory Group consisting of top-notch experts in diversified fields to provide strategic oversight, policy support and technical advisory to the functioning of the innovation lab;
- Facilitate exchange with and adoption of global and national STI resources, foster partnerships between Chengdu Hi-tech Zone and the world's leading innovators (institutions, platforms and companies) through organizing events, forums, workshops and seminars in the local and international level;
- Promote the co-creation, sharing and application of tech-based and non-tech based solutions for pressing development challenges, specifically including:
  - a. Conduct future-thinking analysis via leveraging UNDP's global network of experts in the foresight field to identify key upcoming trends and challenges;
  - b. Facilitate 'Entrepreneurial Innovation' by connecting local and international incubators with start-ups with strong focus on social good; organizing forums and workshops under the theme of incubation to facilitate regular exchange.
- Connect fintech with social innovation, advance fintech for good in areas such as inclusive finance and impact investing, around technologies like big data, cloud computing, machine learning, blockchain, etc.
- Jointly conduct systematic research in collaboration with stakeholders and publish key knowledge products, including:
  - a. Annual Thematic Report highlighting milestones and key achievements of the National Innovation Platform, challenges overcome and prospects for the future;
  - b. Working Paper on key trends and cross-cutting issues in science, technology, innovation and sustainable development;
  - c. Periodic review of national STI policies of South-South Cooperation countries to create and enhance an enabling environment for STI development, including policy innovation and institutional innovation; with the aim of creating more flexible and enabled institutions for the implementation of STI;

- d. Smart Cities case study, demonstration, tech-based innovation in city governance – a “design week” style of showcasing social innovation cases, raise public awareness and engagement.

### **Development of partnerships and mechanisms for innovative knowledge transfer**

Successful innovation-based development is not primarily about the transfer of hardware, but of the soft skills, mechanisms and the management systems that allow developing countries to effectively adapt and use technologies based on their own specific needs and situations. The project aims to foster innovative partnerships for foreign direct investment and trade, public-private partnerships, South-South cooperation and development assistance, or any of such forms combined to facilitate effective knowledge transfer and address practical development issues. By partnering closely with global and regional innovation facilities, the project will seek to stimulate necessary policy, financial, technical and communication support to ensure successful transfer and application of innovative knowledge, with priorities on pressing development challenges such as poverty reduction, environmental protection, etc. Meanwhile, targeted interventions with private partners will also be sought to strengthen their in-house R&D and absorption capacity to ensure that technology transfer yields expected productivity gains.

#### ***Indicative Activities:***

- Organize an annual development challenge week - a high-level, global event engaging the best and the brightest in the tech sector to spend a week in Chengdu to come up with innovative ideas and designs to solve development challenges. A theme of one specific development challenge will be selected for each year. Winners of the event will receive recognition from UNDP and CDHTMC. An annual award event will also be held at the Platform to highlight the development challenge week winners, as well as promote awareness of Platform projects and progress with STI;
- Help government conduct partnership mapping, leveraging global experience, expertise and best practices to streamline policies and improve mechanisms to systematically engage stakeholders in the process of knowledge transfer;
- Develop and implement pilot and demonstration projects for innovation-based development, with a focus on poverty alleviation; Identify and select demonstration cases for various models of innovative partnerships, conduct

case analysis to document experience and lessons learned for dissemination and advocacy;

- Design a monitoring and evaluation framework and criteria to assess the efficiency of innovation knowledge transfer for the SDGs. Set up multi-sectoral evaluation working group to conduct participatory monitoring and evaluation work. Summarize lessons learned and good practices for global dissemination;

**Output 4 - Innovation-based sustainable development in China and other developing countries promoted through a solution exchange mechanism, and to leverage existing STI to improve South-South cooperation and make contributions to China's main global development measure.**

Under this component, a solution exchange mechanism will be developed to facilitate knowledge exchange, mutual learning on innovative development practices and collaboration across countries and regions. The mechanism aims to provide integrated access to innovative development knowledge across the region. It also helps bring in learning resources and engage communities on the design, implementation, and evaluation of innovation policies. Initially, the mechanism will help users map and benchmark innovative practices across different countries, learn how innovation systems operate in different settings, then adapt, devise and apply effective policy solutions to solve their own development challenges. More broadly, such a mechanism will facilitate dialogues and understanding between China and other developing countries including the South-South Cooperation countries, and provide a space for them to exchange operable, replicable and scalable innovative solutions for sustainable development.

#### **Innovative Solution Exchange mechanism initiated**

The platform of innovative solution exchange will be jointly launched by UNDP, Chengdu Hi-tech Zone and other stakeholders. During the initial period of six months, priority will be given to map available innovative solutions in the region, which will be analysed, categorized and assessed to other development settings. The project's Technical Advisory Group will help develop a framework to evaluate the practices against a list of criteria such as implementation conditions, potential benefits, cost implications, relevance and applicability to other development settings, engagement models, etc. The result will be an inventory of innovative solutions being developed and maintained by the innovation lab. Towards the second phase of the project, UNDP will work with project stakeholders in identifying opportunities and matching innovative solutions for identified development challenges in Chengdu and beyond.

- UNDP and stakeholders jointly launch the platform for innovative solution exchange;
- Map out available innovative development solutions across key SDG sectors and create an inventory of such practices in the region;
- Establish pilot projects on innovation for the SDGs (pilot SDG community/villages) in China and selected South-South Cooperation countries to serve as demonstrations of innovation-driven development;
- Identify development bottlenecks at SDG pilot communities, and select 1-2 problems to pilot the solution exchange mechanism by matching the problem with innovative best-practices solutions from the inventory;
- Validate models and results, identify appropriate opportunities to scale up and replicate successful experiences in other contexts;
- Encourage local institutional and individuals to join impact investment and facilitate potential regional cooperation, therefore matching the demand and supply sides.

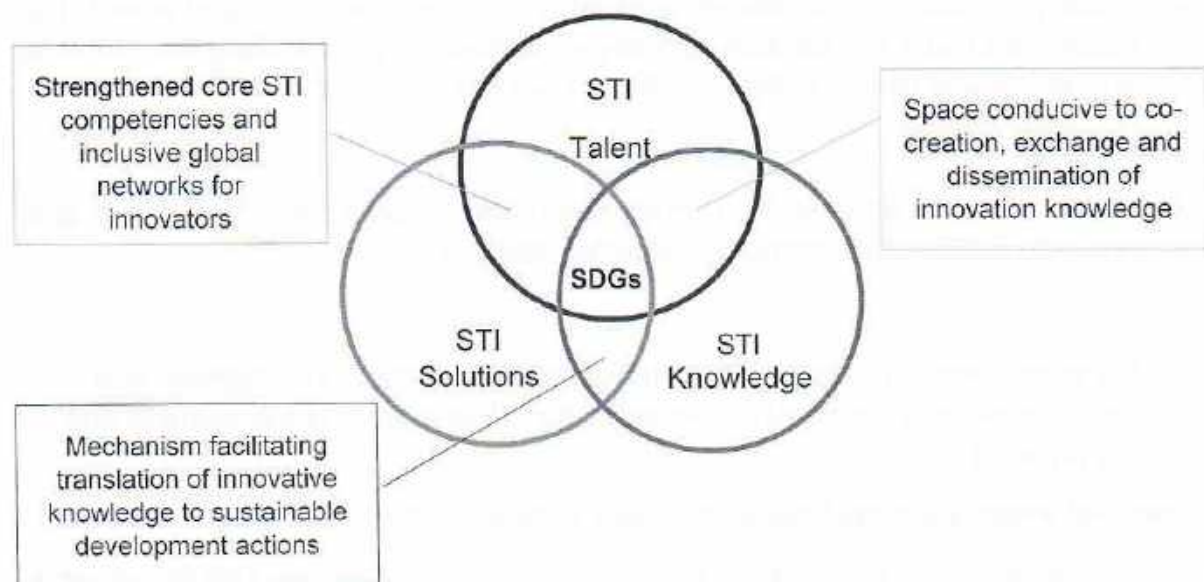
### **Successful experience and methodologies disseminated**

Building on experience and lessons learned from the initial phase, UNDP will work with stakeholders in organizing and participating in knowledge sharing events to disseminate the methodologies, process and results of the solution exchange mechanism across the region, with a focus on South-south cooperation countries. Meanwhile, efforts will be made to foster innovation through ground-breaking technologies, efficient business models, and innovative governance approaches for urban development.

- Leverage the existing high-profile events and mechanisms in Chengdu including the Western China International Fair, organize international workshops as part of the main event or side event, inviting participants from South-South Cooperation countries for knowledge exchange on STI solutions for the SDGs, showcasing and exchanging Chengdu's and other countries' STI policy outcomes, best practices, challenges and pathways towards 2030;

- Form working groups with enterprises, universities and research centres from South-south cooperation countries to establish a network to explore effective and sustainable solution exchange mechanisms under the South-South cooperation framework;
- Organize roundtable meetings with participation from leading high-tech zones around the world in knowledge exchange;
- Support capacity building and handholding of stakeholders, nurture partnerships across stakeholders, nationally and internationally, to promote the development and replication of the solution exchange mechanism.

### Conceptual Model – Advancing SDGs for All through Science, Technology and Innovation (STI)



### 2.3 Implementation Strategy

The project will be initiated and implemented immediately after signing the project document. The duration of the Project is five years (2019-2024).

#### 1) Implementation Activities

Common activities will be explored to maximize the effective use of resources including: training activities for local government and community groups; technical assistance; annual review workshops; project dissemination, e.g. website, training



manuals, guidelines; final project workshops. The objective of these activities is to foster the skills of all project participants for undertaking the core activities over the life of the project, and for continuing related activities beyond the program. Where possible, these activities will be participated in by other organizations outside of China. Particular themes will be identified based upon perceived community needs, requirements, expertise, and experience of participants.

## **2) Communication and Dissemination of project achievements**

Knowledge and experiences obtained through undertaking the project shall be transferred by bringing together the participants interested in innovation-based development. Collaboration and communication with these participants will enhance creative thinking and the development of new approaches. Regular meetings and annual workshops will be organized to solicit inputs from project members and user sectors. The project achievements will be communicated to government, academia and the private sector through knowledge products such as publication of articles, reports, brochures and newsletters, provision of seminars and workshops, and transfer of technologies, as well as other appropriate communication channels.

## **3) Stakeholder and Community Involvement**

Involvement of local communities and stakeholders will be critical for ensuring systematic participation of the communities in the project. To ensure the achievement of intended outcomes, the programme will widely involve all stakeholders including local governments, NGOs, private sector, financial institutions and communities in providing advice and feedback to the programme.

### **2.4 Beneficiaries**

Direct beneficiaries include government organisations, institutions and related agencies at the national, provincial, municipal, and community levels by strengthening capacities in innovation-based sustainable development. Field-based implementation support teams and project management staff/advisors/managers will also benefit from the overall capacity development initiatives. Local community members, ethnic minorities groups and women will benefit through capacity building, job or livelihoods improvement and income generation attributable to the adaptation of innovation development solutions. Furthermore, demand for the application of advanced technologies will also stimulate firms and enterprises to introduce, develop, and adapt more STI.

### **2.5 Partnership Strategy**

The successful implementation of the project will depend on the development of effective partnerships between different agencies at multiple levels. The partnerships involved in this project will help to promote possible technology diffusion, transfer and formation of appropriate alliances. They will be pursued with international, national and local agencies to achieve more outcomes. The partnership strategy in the project is proposed at international, national, local, institutional, and technical levels.

### **1) International Level**

United Nations Development Programme (UNDP) will be the leading international organization in this project and will possibly be joined by other international/regional agencies and bilateral parties. UNDP is the largest multilateral development assistance institution in the United Nations operational system for development, for helping promote human sustainable development through technical assistance; to date, it undertakes development activities in over 100 recipient countries with a worldwide network of field offices. The project interests of UNDP and other international organizations will be mainly related to the achievement of the Sustainable Development Goals. In coordination with its global and regional units, UNDP will take the lead in in the project design, providing assistance to capacity development, policy advocacy, knowledge production, dissemination and exchange, as well as needed technical and project management support. Leveraging its global network, especially experience and expertise in innovation-based development, UNDP will play an active role in the establishment and operations of the innovation lab in Chengdu.

### **2) National Strategic Guidance**

Taking a leading role in building national STI capabilities, Ministry of Science and Technology (MOST) will provide strategic guidance to the overall design, planning and technical aspects of the project.

### **3) National Coordination and Management**

China International Centre for Economic and Technical Exchange (CICETE) is the coordination and management agency of UNDP projects in China designated by the Ministry of Commerce (MOFCOM). It has over 30 years' experience in managing UNDP's projects, and has successfully organized and implemented over 900 projects in China. In this project, CICETE will sign the project document on behalf of the Chinese government and will work together with UNDP to oversee project

implementation and overall quality assurance, and to provide necessary support to the project.

#### **4) Local level**

The Chengdu Hi-Tech Industrial Development Zone Management Committee (CDHTMC) will take the lead in coordinating relevant government departments in providing guidance, policy, and organizational support for project implementation. In addition, other locally based organizations, community-based groups, non-profit organizations and private sector partners may also offer needed implementation support relevant to the research, knowledge sharing and application of innovation-based development. Concerned public and private institutes will be identified and contracted to support or undertake implementation of specific activities where such a role is clarified in the project work plans.

#### **5) Technical level**

The support and assistance of the technical suppliers of expertise and invested capital will be critical to the implementation of the project. Hence the project parties will hire external experts or form collaborative relationships with technical partners to make the project a success. Concerned partners may include key academic/research institute partners or individual experts engaged in specific fields of STI both globally and in China. The project will also seek collaboration with private sector partners, wherever relevant and possible, who may provide needed strategic, technical, funding and in-kind resource support to the project.

### **Part 3. Management Arrangements**

The project will closely abide by the National Implementation Modality. In accordance with the UNDP Project Management Manual, CICETE will be the implementing partner under the authorization and designation from the Ministry of Commerce of China (MOFCOM). With guidance from MOST, under the coordination and management of CICETE, CDHTMC will be the project responsible party and will carry out relevant project activities.

#### **1. Set up a Programme Steering Committee (PSC)**

In line with overall project objectives, a Programme Steering Committee (PSC) will be established. It will be joined by representatives from MOST, CICETE, UNDP, and the CDHTMC. The PSC will convene at least once per year.

The responsibilities of the PSC include:

- 1) providing guidance and support to project design, implementation and supervision;
- 2) approving the AWP;
- 3) reviewing and approving the AWP of the project;
- 4) providing technical input and advice to the project according to the industry to which it belongs;
- 5) mobilizing policy, human and matching financial resources to support project implementation;
- 6) coordinating differences within the project to ensure collaboration among participating organizations; and
- 7) providing comprehensive evaluation of the final results of the project.

## **2. Set up a Programme Management Office (PMO)**

The project will designate two joint National Project Directors (NPDs), respectively by CICETE and CDHTMC (representative from the Chengdu Hi-tech Zone shall be the Deputy Director of the CDHTMC who is in charge of new economic development, and should be the same person with the representative from PSC). The NPD will be accountable to the PSC and will be a member of the PSC; the NPD will also be responsible for guiding the formulation of the AWP, reviewing and submitting the AWP to the Committee for approval, guiding and monitoring the implementation of the project; overseeing the implementation of the project funds according to the AWP approved by the Committee; and coordinating project implementation to ensure that the project achieves the expected results.

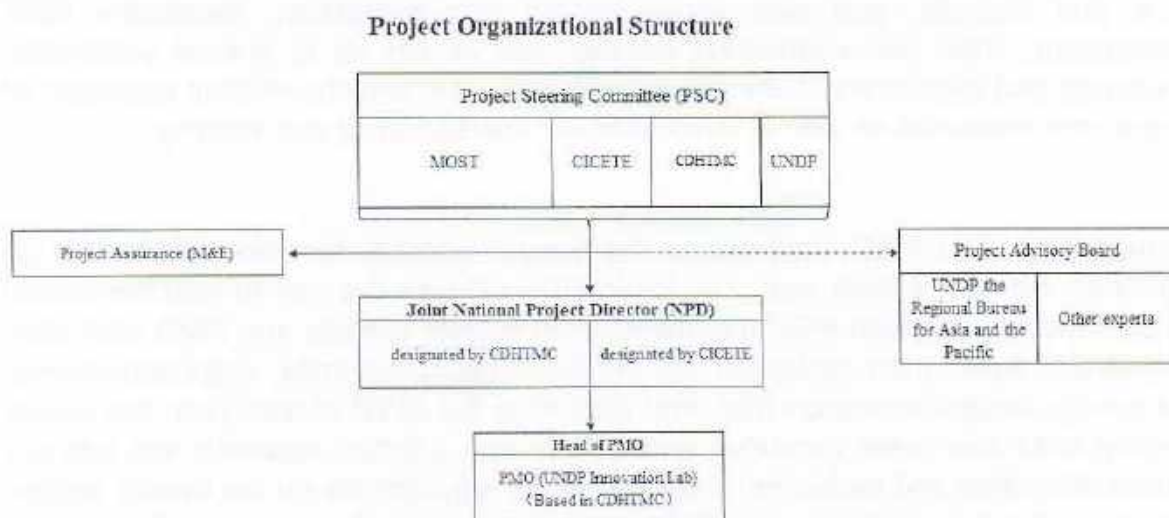
The PMO will be located at the CDHTMC, the Director of which shall be appointed by CDHTMC, and will be responsible for project implementation under the leadership of the NPD, and report the progress of the project implementation to the NPD in a timely manner. The Director of the PMO will be responsible for the day-to-day management, project implementation, division of staff, supervision, inspection and evaluation reports; the organization and implementation of project activities in accordance with the work plan and related budgets to ensure the achievement of the outputs and results set out in the project document; controlling the progress of the project, identifying project risks in a timely manner and report to the NPD.

In order to better leverage the global and regional resources of UNDP, under the coordination of the PMO, a Technology for SDGs Innovation Lab will be established, in order to connect UNDP's innovation networks, resources, mode and international experiences.

The team of Innovation Lab will be responsible for implementing some parts of the direct support, in accordance with the AWP under the consensus of all parties. Under "UNDP direct support to NIM" modality, UNDP will provide support in implementing activities in accordance with UNDP rules and regulations and in close consultation with implementing partners. Those direct-support activities may include the specific studies on emerging fields, competence building, collecting solutions on global sustainable development, and connecting global innovation network, resources and experts. UNDP China will be in collaboration with UNDP Asia-Pacific Regional Hub to take an active part in designing relevant events, connecting experts and resources and providing support in other areas.

### 3. Set up a Project Advisory Group (PAG)

A Project Advisory Group will be established to provide guidance on the strategic direction of the project. The group will be composed of relevant domestic and foreign experts, whose responsibilities include: guiding strategic directions and macro policies; providing technical advice; mobilizing relevant resources to support the development of projects; integrating the needs for the sustainable development of local communities, supporting the implementation of pilot and demonstration projects, and supporting policy research and the promotion, dissemination and replication of project results. The members of the PAG will be jointly confirmed by the PSC.



## Part 4. Monitoring and Evaluation

The Monitoring and Evaluation (M&E) of the project will be undertaken in accordance with UNDP's practices and policies utilizing Results Based Management (RBM) methodology. The M&E will focus on outcomes and outputs of interventions, institutional results and partnerships, policy advice and dialogue, advocacy and coordination for improvement of innovation-based sustainable development Chengdu, as well as creation, sharing and exchange of innovative knowledge between China and other developing countries including South-South Cooperation countries.

In detail, the M&E focuses on the following key objectives:

- specific products and services from the project;
- significant contributions to overall institutional setting and policy formation;
- enhancement of the management efficiency of the project;
- assurance of consultation/participation from all stakeholders;
- dynamic assessment and timely supervision of the project progress;
- experiences and lessons learnt from the project and dissemination of the project results.

The achievement level of the desired project outcomes and outputs will be monitored by an integrated system. The system consists of M&E project activities, annual work plans and budgets, and peer group review and evaluation. Necessary M&E mechanisms, tools and conducting reviews, will be set up to ensure continuous monitoring and evaluation of the project with a view to ensure efficient utilization of programme resources as well as accountability, transparency and integrity.

**Annual M&E.** The PMO shall deliver the annual report to the joint NPD within 20 days after the end of each year. The joint NPDs will take the lead to host the annual review meeting, at which PSC members, main project officials and PMO staff shall be present. Apart from reviewing the implementation progress, outputs/outcomes and quality, budget execution rate, and approving the AWP of next year, the review meeting shall also make decisions on major issues, conduct research and address current difficulties and problems, and lastly make adjustments on the overall design, outputs, outcomes, activities and budget of the project if necessary. The official

meeting minutes of the review meeting shall be confirmed and signed by all parties from the PSC.

## **Part 5. Legal Context**

This project document shall be the instrument referred to as such in Article 1 of the Standard Basic Agreement between the Government of the People's Republic of China and the United Nations Development Program, signed by the parties on June 29, 1979. The reference to "Implementing Partner(s)" shall mean "Executing Agency (ies)" as used in the SBAA and may include third party private sector partners in the future.

## **Part 6. Funding**

The total budget for the project is US\$ 5,010,000, from which US\$ 5 million is committed from the cost-sharing from CDHTMC and US\$ 10,000 is committed from the UNDP TRAC.

CDHTMC will deliver the funding of US\$ 5 million in five years, in which GMS takes up 8% of the total funding. Provisionally, a funding of US\$ 1million will be delivered annually (including the carry-over from the previous year). The rest of the funding should be used for project management and events with consensus of Chengdu Hi-tech Zone, UNDP and CICETE.

The PSC is responsible for reviewing the annual AWP and budget. In accordance with relevant management provisions from the UNDP Project Management Manual, and under the approved annual budget framework, CDHTMC will deliver the funding to CICETE. The funding will be allocated to UNDP's direct implementation and PMO's implementation of project. CICETE and UNDP China will jointly discuss and formulate the service contract and detailed programme of specific activities (the detailed programme should be provided by UNDP) to specify the responsibilities and rights of UNDP China as providing support to national implementation of the project. The use of the funding for the PMO shall be approved upon signature of two NPDs assigned by the Head of PMO.

### **1. Cost-Sharing from Chengdu Hi-tech Zone:**

- Identification and preparatory work of the project, including workshops and training;
- Costs of short-term domestic experts;
- Workshops: travel costs, accommodation, allowance, venue costs;
- Domestic study tours and training: covering participants' accommodation, allowance and travel costs in China;
- Overseas training: travel costs of some trainees, domestic costs related to application and preparation;
- Costs of demonstration or piloting activities;
- Follow up of actions recommended by the program, including dissemination workshops and related materials printing;
- Partial costs of PMOs' operation, including communication, transportation as necessary procurement of project-used equipment and materials for PMOs;
- All necessary resources to facilitate program management and sub-program implementation.

In addition, the funding will also cover:

- Technical assessments and research;
- Pilot of STI supported SDG village/community;
- Community engagement and mobilization;
- Independent monitoring and auditing;
- Communications strategy;
- Project management support.

	Time	Amount (US\$)	Percentage of Total (%)
First payment	Before December 25, 2019	562,000	11.24%
Second payment	Before March 25, 2019	438,000	8.76%
Third payment	Before December 25, 2020	1,000,000	20%



Fourth payment	Before December 25, 2021	1,000,000	20%
Fifth payment	Before December 25, 2022	1,000,000	20%
Sixth Payment	Before December 25, 2023	1,000,000	20%
<b>TOTAL</b>		<b>5,000,000</b>	

*The value of the payment, if delivered in a currency other than United States dollars, shall be determined by applying the exchange rate of the United States USD on the date of payment. Exchange rate of payment for the first year shall be calculated as 1USD=6.6RMB, as of the exchange rate of 4th December 2017.*

## 2. UNDP Inputs:

- International and national consultants and resource persons;
- Supporting technical services, training activities, study tours, symposiums and workshops, partial operation costs of national PMO including recruitment of project experts, communication, in-city travel and office facilities as necessary;
- Monitoring and evaluation;
- Material and equipment to a limited degree.

## SECTION II –PROJECT RESULTS AND RESOURCES FRAMEWORK

(Year 2019-2024)

EXPECTED CP OUTPUTS and indicators including annual targets	PLANNED ACTIVITIES  <i>List all activities including M&amp;E to be undertaken during the year towards stated CP outputs</i>	PLANNED BUDGET	
		Source of Funds	Budget Description  Amount (US\$)
Outcome One	To enhance the innovation competencies and global perspective of the Chengdu Hi-tech Zone, incorporate the SDGs into future development plans, and foster the transition from sheer economic outputs to the new driving force of sustainable and inclusive development pathways;		
Output 1	Enhanced government capabilities with focus on high-value-added policy support for innovation		

<p><b>Output 1.1:</b> Project jointly designed and management structure set up and in operation</p> <p><b>Target 1.1:</b> To establish efficient and effective management and implementation structure for the project.</p>	<p>1.1.1 Project is jointly designed with engagement of key stakeholders</p>	<p>Cost sharing</p>	<p>71200 International Consultants 71300 National Consultants 74500 Meetings 71600 Travel 74500 Meetings</p>	<p>10,000 20,000 15,000 10,000 20,000</p>
<p><b>Indicator 1.1</b></p> <ul style="list-style-type: none"> <li>- One National Steering Committee meeting;</li> <li>- One Programme Management Office;</li> <li>- One project inception meeting;</li> <li>- List of national and international expert consultants;</li> <li>- No. of project cooperating agencies identified;</li> </ul>	<p>1.1.1 Establish Project Steering Committee (PSC) and organize the first PSC meeting</p> <p>1.1.2 Set up Programme Management Office (PMO); Appoint Joint National Project Director</p> <p>1.1.3 Hire national and international expert consultants for respective project components</p>	<p>Cost sharing</p> <p>Cost sharing</p> <p>Cost sharing</p>	<p>71200 International Consultants 71300 National Consultants*2</p>	<p>20,000 30,000</p>

<p>First annual review meeting; Four Mid-term project review meetings; Four Final project workshops.</p>	<p>1.1.4 Hold project inception workshop and project management training in Chengdu</p>	<p>Cost sharing</p>	<p>74500 Inception Workshop 74500 Other Training</p>	<p>10,000</p>
	<p>1.1.5 Finalise management arrangements for each project component</p>			
	<p>Sub-Total (1.1)</p>			<p>\$135,000</p>

<p><b>Output 1.2: Project implemented under proper oversight, monitoring and review</b></p>	<p>1.2.1 Monitoring, review and management of each project component (including missions to the field)</p>	<p>Cost sharing</p>	<p>71200 International Consultants 71300 National Consultants 72100 Materials 72200 Equipment purchase 74500 Rental &amp; Maintenance 71600 Travel</p>	<p>20,000 15,000 20,000 14,500 20,000 40,000</p>
<p><b>Target 1.2:</b> To ensure effective implementation of the project and the quality of expected results</p>	<p>1.2.2 Annual Steering Committee and project review meetings (To review progress, discuss baseline studies, confirm selection of demonstration projects, endorse implementation plans and resolve any financial issues.)</p>	<p>Cost Sharing:</p>	<p>71200 International Consultants 71300 National Consultants 74500 Annual review meeting</p>	<p>15,000 10,000 25,000</p>
<p><b>Indicator 1.2</b></p> <ul style="list-style-type: none"> <li>- Annual Steering Committee Meetings</li> <li>- Annual review meetings</li> <li>- Mid-term project review</li> <li>- Final project review</li> <li>- regular (annual or more frequent) project monitoring missions</li> <li>- Project audit reports</li> </ul>				

	1.2.3 Annual project audit	Cost Sharing:	72100 Service Contract	100,000
	1.2.4 Mid-term and final project review and workshops	Cost Sharing	71200 International Consultants 71600 Travel	20,000 5,000
		Cost Sharing	71300 National Consultants 71600 Travel 74500 Reporting 74500 Meeting	10,000 5,000 2,500 20,000
	Sub-Total (1+2)	Cost Sharing:		\$342,000

<p><b>Output 1.3: Capacity building for innovation-friendly policies</b></p> <p><b>Target 1.3:</b> To enhance management capacity of local authorities, regulators, and related governmental agencies in supporting innovation-driven development, through advancement of related policies, regulations and guidelines, improvement of communication and coordination among various authorities, and provision of practical decision supporting tools and platforms.</p> <p><b>Indicator 1.3:</b> - No. of workshops;</p>	<p>1.3.1 Conduct investigations and surveys on current policies and regulations of STI in national and local setting</p>	<p>Cost sharing</p>	<p>71300 National Consultants 74500 Reporting</p>	<p>10,000 10,000</p>
	<p>1.3.2 Evaluate on policy mechanisms and their effects related to innovation-based development in Chengdu</p>	<p>Cost sharing</p>	<p>74500 National/International Study tour 71300 National Consultants</p>	<p>10,000 10,000</p>
	<p>1.3.3 Provide suggestions for innovation-friendly laws, regulations, policies and guidelines</p>	<p>Cost sharing</p>	<p>71200 International Consultants 71300 National Consultants 74500 Reporting</p>	<p>20,000 20,000 4,000</p>

<ul style="list-style-type: none"> <li>- No. of agreements or memorandums;</li> <li>- Two national or international tours;</li> <li>- No. of trainings and training materials;</li> <li>- technical guidance documentations;</li> <li>- No. of coordination meetings and participating agencies;</li> <li>- A set of decision-support tools;</li> <li>- No. of reports and analytical papers</li> </ul>	<p>1.3.4 Organize training workshops on policies, regulations, and technical standards and help set policy priorities for both short- and long-term STI management in Chengdu</p>		<p>71200 International Consultants 71300 National Consultants 74500 Workshops</p>	<p>25,000 16,000 60,000</p>
<ul style="list-style-type: none"> <li>- No. of coordination meetings and participating agencies;</li> <li>- A set of decision-support tools;</li> <li>- No. of reports and analytical papers</li> </ul>	<p>1.3.5 Enhance coordination and communication among different regulatory authorities and stakeholders related to innovation support</p>		<p>74500 Meeting</p>	<p>15,000</p>
	<p>1.3.6 Develop a platform to facilitate exchange, dialogues and discussions on key policy issues towards achieving Chengdu's innovation-based development targets, e.g. smart cities, innovative financing, SDG localization, etc.</p>		<p>74500 Meeting</p>	<p>102,000</p>
	<p>Subtotal (1.3)</p>	<p>Cost sharing</p>		<p>\$302,000</p>



Expanded innovator network to ensure "innovation for all"				
<b>Output 2</b>				
<p><b>Output 2.1: Improved managerial practices to facilitate private sector innovation</b></p> <p><b>Target 2.1:</b> strengthen public-private links to support private sector in improving the quality of innovation practices; leveraging global and local expertise to strengthen the ability of private sector partners in managing innovation planning, partnerships, target setting, monitoring of performance, etc.</p> <p><b>Indicator 2.1:</b></p> <ul style="list-style-type: none"> <li>- No. of workshops;</li> <li>- No. of agreements or memorandums;</li> </ul>	2.1.1 Investigate the organizing process, planning, monitoring, operation and other management practices of firm-level innovation	Cost sharing	71200 International Consultants 71300 National Consultants 74500 Workshops	20,000 10,000 5,000
	2.1.2 Organize training sessions related to global best practices and experience in improving innovation management practices for private sectors	Cost sharing	71200 International Consultants 71300 National Consultants 74500 Workshops	15,000 10,000 30,000
	2.1.3 Provide advisory services to address capacity gaps and help companies especially seed, start-ups and SMEs achieving benchmark quality of innovation management	Cost sharing	71200 International Consultants 71300 National Consultants 74500 Workshops	20,000 10,000 20,000

<ul style="list-style-type: none"> <li>- National or international tours;</li> <li>- No. of training and training materials;</li> <li>- Technical guidance documentations;</li> <li>- No. of coordination meetings and participating agencies;</li> <li>- A set of decision-support tools;</li> <li>- No. of reports and analytical papers.</li> </ul>	<p>2.1.4 Develop applicable tools and instruments for effective management of firm-based innovation</p>	<p>Cost sharing:</p>	<p>71200 International Consultants 71300 National Consultants 74500 Reporting</p>	<p>20,000 10,000 10,000</p>
	<p>Subtotal (2.1)</p>	<p>Cost sharing</p>		<p>\$180,000</p>

<p><b>Output 2.2: Inclusive participation in STI by youth, community organizations, and other social groups</b></p> <p><b>Target 2.2:</b> Unleashed potentials of individuals, communities and society in accelerating scientific and technological advances in achieving the SDGs for all</p>	<p>2.2.1 Develop cross-disciplinary capacity building activities (training programme, study tours and research etc.) targeted at youth groups, social organization and community-based groups</p>	<p>Cost sharing</p>	<p>71200 International Consultants 71300 National Consultants 74500 National/International Study tour 74500 Workshops 74100 Communications</p>	<p>20,000 10,000 20,000 5,000 10,000</p>
<p><b>Indicator 2.2:</b></p> <ul style="list-style-type: none"> <li>- No. of workshops;</li> <li>- No. of reports published;</li> <li>- No. national or international tours;</li> <li>- No. of trainings and training materials;</li> <li>- Public participation and coordination mechanisms in operation;</li> <li>- No. Advocacy and media events.</li> <li>- No. of public awareness raising;</li> </ul>	<p>2.2.2 Foster the creation and cultivation of a youth innovators community to create a pool of knowledge and experience</p>	<p>Cost sharing</p>	<p>71200 International Consultants 71300 National Consultants 74500 Workshops 74100 Communications</p>	<p>15,000 10,000 15,000 10,000</p>

<p>- Annual conference.</p>	<p>2.2.3 Sponsor workshops, innovation awards, hackathons, prize challenges or similar events to encourage localized innovation and community participation.</p>	<p>Cost sharing: Sichuan</p>	<p>71200 International Consultants 71300 National Consultants 71600 Travel 74500 Workshops 74100 Communications</p>	<p>20,000 10,000 20,000 10,000 10,000</p>
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	2.2.4 Organize annual global innovation conference to facilitate exchange, mutual learning and networking among innovators	Cost sharing: Sichuan	71200 International Consultants 71300 National Consultants 71600 Travel 74500 Workshops 74100 Communications	20,000 10,000 20,000 10,000 10,000
	Subtotal (2.2)	Cost sharing		\$255,000
Outcome Two	To establish and expand the innovation networks for the globe, explore the pathway to internationalization and enhance the stamina of opening up; Explore and foster the innovative pathways to internationalization based on SDGs through organizing flagship international activities.			
Output 3	Enabling eco-system conducive to innovation collaboration and leadership			

<p><b>Output 3.1: Innovation Lab launched and operated in Chengdu</b></p> <p><b>Target 3.1:</b> Integrated support and services provided to support innovation-based development in Chengdu</p> <p><b>Indicator 3.1:</b></p> <ul style="list-style-type: none"> <li>- Launching event;</li> <li>- A group of advisory experts nominated;</li> <li>- No. national or international</li> </ul>	<p>3.1.1 Launch an innovation lab in Chengdu Hi-tech Zone in collaboration with multi-stakeholders from government, academia, and international organizations</p> <p>3.1.2 Set up advisory group consisting of top-notch experts in diversified fields to provide strategic oversight, policy support and technical advisory to the functioning of the innovation lab</p>	<p>Cost sharing</p>	<p>71200 International Consultants 71300 National Consultants 71600 Travel 74500 Workshops</p>	<p>20,000 10,000 10,000 20,000</p>
		<p>Cost sharing</p>	<p>71200 International Consultants 71300 National Consultants 71600 Travel</p>	<p>50,000 30,000 30,000</p>

<p>tours:</p> <ul style="list-style-type: none"> <li>- No. of trainings and training materials;</li> <li>- No. advocacy and media events;</li> <li>- Annual conference;</li> <li>- No. of exchange and learning activities;</li> <li>- Data innovation initiatives;</li> <li>- Research conducted and knowledge products published.</li> </ul>	<p>3.1.3 Facilitate exchange with and adoption of global and national STI resources, foster partnerships between Chengdu Hi-tech Zone and world's leading innovators (institutions, platforms and companies) through organizing events, forums, workshops and seminars in the local and international level</p>	<p>Cost sharing</p>	<p>71200 International Consultants 71300 National Consultants 74500 National/International Study tour 74500 Workshops</p>	<p>500,000 460,000 880,000 390,000</p>
	<p>3.1.4 promote the co-creation, sharing and application of tech-based and non-tech based solutions for pressing development challenges</p>	<p>Cost sharing</p>	<p>71200 International Consultants 71300 National Consultants 74500 Workshops</p>	<p>10,000 10,000 10,000</p>

	3.1.5 Jointly conduct systematic research in collaboration with stakeholders and publish key knowledge products	Cost sharing	71200 International Consultants 71300 National Consultants 74500 Workshops 74500 Reporting	50,000 30,000 10,000 10,000
	Subtotal (3.1)	Cost sharing		\$2530,000
<p><b>Output 3.2: Development of partnerships and mechanisms for innovative knowledge transfer</b></p> <p><b>Target 3.2:</b> bringing together government, civil society, UN, academia and the private sector to co-create solutions for development challenges</p>	3.2.1 Organize an annual development challenge week - a high-level, global event engaging the best and the brightest in the tech sector	Cost sharing: Sichuan	71200 International Consultants 71300 National Consultants 71600 Travel 74500 Workshops	10,000 10,000 20,000 10,000



<p><b>Indicator 3.2:</b></p> <ul style="list-style-type: none"> <li>- Annual, high-level events;</li> <li>- No. of stakeholder coordination meetings;</li> <li>- No. of reports published;</li> <li>- No. knowledge sharing and dissemination activities;</li> <li>- No. national or international missions;</li> <li>- No. of demonstration project initiated;</li> <li>- Multi-sectoral monitoring and evaluation framework designed and running.</li> </ul>	<p>3.2.2 Help government conduct partnership mapping, leveraging global experience, expertise and best practices to streamline policies and improve mechanisms to systematically engage stakeholders in the process of knowledge transfer</p>	<p>Cost sharing</p>	<p>71200 International Consultants 71300 National Consultants 71600 Travel 74500 Workshops</p>	<p>5,000 2000 4000 10,000</p>
	<p>3.2.3 Develop and implement pilot and demonstration projects for innovation-based development, with a focus on poverty alleviation; Identify and select demonstration cases for various models of innovative partnerships, conduct case analysis to document experience and lessons learned for dissemination and advocacy</p>	<p>Cost sharing</p>	<p>72100 Service Contract 71200 International Consultants 71300 National Consultants 74500 Workshops 74500 Reporting</p>	<p>10,000 20,000 10,000 10,000 10,000</p>

	<p>3.2.4 Design a monitoring and evaluation framework and criteria to assess the efficiency of innovation knowledge transfer for the SDGs. Set up multi-sectoral evaluation working group to conduct participatory monitoring and evaluation work. Summarize lessons learned and good practices for global dissemination.</p>	<p>Cost sharing</p>	<p>71200 International Consultants 71300 National Consultants 71600 Travel 74500 Workshops 74500 Reporting</p>	<p>20,000 15,000 15,000 10,000 10,000</p>
	<p>Subtotal (3.2)</p>	<p>Cost sharing</p>		<p>\$201,000</p>
<p><b>Output 4</b></p>	<p><b>Innovation-based sustainable investment and development in China and other developing countries promoted through a solution exchange mechanism</b></p>			

<p><b>Output 4.1: Innovative Solution Exchange mechanism initiated</b></p> <p><b>Target 4.1:</b> Innovative solutions exchange mechanism developed to match innovative solutions for identified development challenges in Chengdu and beyond</p> <p><b>Indicator 4.1:</b></p> <ul style="list-style-type: none"> <li>- An inventory of innovative solution developed and maintained;</li> <li>- A set of evaluation framework and criteria developed;</li> <li>- No. and type of pilot project;</li> <li>- No. national or international</li> </ul>	<p>4.1.1 UNDP and stakeholders jointly launch the platform of innovative solution exchange</p> <p>4.1.2 Map out available innovative development solutions across key SDG sectors and create an inventory of such practices in the region</p>	<p>Cost sharing</p> <p>Cost sharing</p>	<p>71200 International Consultants 71300 National Consultants 71600 Travel 74500 Workshops</p> <p>71200 International Consultants 71300 National Consultants 72100 Service Contract 74500 Workshops</p>	<p>10,000 20,000 10,000 10,000</p> <p>20,000 15,000 30,000 10,000</p>
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missions; - No. of demonstration project initiated; - No. of successful matching of innovation solutions and problems.	4.1.3 Establish pilot projects on innovation for the SDGs (pilot SDG community/villages) in China and selected South-South Cooperation countries to serve as demonstrations of innovation-driven development.	Cost sharing	72100 Service Contract	90,000
	4.1.4 Identify development bottlenecks at SDG pilot communities, and select 1-2 problems to pilot the solution exchange mechanism by matching the problem with innovative best-practices solutions from the inventory	Cost sharing	71200 International Consultants 71300 National Consultants 74500 Workshops 74500 Reporting	10,000 10,000 10,000 10,000

	<p>4.1.5 Validate models and results, identify appropriate opportunities to scale up and replicate successful experiences in other contexts</p>	<p>Cost sharing</p>	<p>71200 International Consultants 71300 National Consultants 74500 Workshops 74500 Reporting</p>	<p>20,000 10,000 10,000 10,000</p>
	<p>Subtotal (4.1)</p>	<p>Cost sharing</p>		<p>\$305,000</p>
<p><b>Output 4.2: Successful experience and methodologies disseminated</b></p> <p><b>Target 4.2:</b> International/national experience, practices and knowledge on STI-based development documented, shared and disseminated</p>	<p>4.2.1 Leverage the existing high-profile events and mechanisms in Chengdu including the Western China International Fair, organize international workshops as part of the main event or side event, inviting participants from South-South Cooperation countries for knowledge exchange on STI solution for SDGs, showcasing and exchanging Chengdu's and other countries' STI policy outcome, best practices, challenges and pathways towards 2030</p>	<p>Cost sharing: Sichuan</p>	<p>71200 International Consultants 71300 National Consultants 71600 Travel 74500 Workshops</p>	<p>40,000 20,000 20,000 20,000</p>

<p><b>Indicator 4.2:</b></p> <ul style="list-style-type: none"> <li>- No. exchange and learning events;</li> <li>- Initiatives/proposals developed to promote knowledge exchange and mutual learning;</li> </ul>	<p>4.2.2 Form working groups with enterprises, universities and research centres from South-south cooperation countries to establish a network to explore effective and sustainable solution exchange mechanism under South-South cooperation framework</p>		<p>74500 Meeting</p>	<p>20,000</p>
<ul style="list-style-type: none"> <li>- New partnerships developed to facilitate mutual learning and knowledge sharing;</li> <li>- No. national or international missions;</li> <li>- No. of publications.</li> </ul>	<p>4.2.3 Organize roundtable meetings with participation from leading high-tech zones around the world in knowledge exchange</p>	<p>Cost sharing</p>	<p>72100 Service Contract 71200 International Consultants 71300 National Consultants 74500 Workshops 74500 Reporting</p>	<p>30,000 20,000 10,000 20,000 10,000</p>

		Cost sharing	71200 International Consultants 71300 National Consultants 74500 Workshops 74500 Reporting	10,000 10,000 10,000 10,000
	4.2.5 Support capacity building and handholding of stakeholders, nurture partnerships across stakeholders, nationally and internationally to promote the development and replication of the solution exchange mechanism	Cost sharing	71200 International Consultants 71300 National Consultants 74500 Workshops 74500 Reporting	10,000 10,000 10,000 10,000
	Sub-total (4.2)	Cost Sharing		\$290,000

Monitoring and Evaluation					\$112,640
UNDP Direct Project Costing (1%)					\$50,000
CICETE Direct Project Costing (1%)					\$50,000
<b>TOTAL</b>				<b>UNDP GMS (3%)</b>	<b>\$138,680</b>
				<b>CICETE GMS (3%)</b>	<b>\$138,680</b>
				<b>TOTAL</b>	<b>\$5,010,000</b>