

The Implementation of the UN Sustainable Development Goals

Lincang's Voluntary Local Review 2023

Lincang Municipal People's Government 2023.11

Contents

3.5 Leaving No One Behind

3.6 Structural Issues



I		
III		
	02	
1	Methodology and Process	9
2 4 6	2.1 General Principles2.2 The Process2.3 Organisations and References2.4 Quantitative Evaluation Methods	10 11 14 15
	04	
17	Progress in Key Task Areas	29
18	4.1 Performance of Sustainable Development Indicators	30
21	4.2 Performance of Key Task Areas	34
22	Fostering Environmental-	38 42
24	Exploiting the Potential of	46
	11 2 4 6 6 17 18 21 22	1 Methodology and Process 2 2.1 General Principles 4 2.2 The Process 6 2.3 Organisations and References 2.4 Quantitative Evaluation Methods 17 Progress in Key Task Areas 18 4.1 Performance of Sustainable Development Indicators 21 4.2 Performance of Key Task Areas Enhancing Interconnectivity Capacities 22 Fostering Environmental-friendly Industries

26

27

Unique Ethnic Resources

Strengthening Innovation Support

50

Lii	ncang's Progress on the SDGs	55	Main Expe
5.1	Overview of the Progress	56	
5.2	Progress on Goals	60	
	SDG1 No Poverty	60	07
	SDG2 Zero Hunger	66	0/
	SDG3 Good Health and Well-being	70	
	SDG4 Quality Education	76	Next Steps
	SDG5 Gender Equality	82	
	SDG6 Clean Water and Sanitation	86	
	SDG7 Affordable and Clean Energy	90	
	SDG8 Decent Work and Economic Growth	94	Annexes
	SDG9 Industry, Innovation and Infrastructure	98	Annex 1 The Targ
	SDG10 Reduced Inequalities	102	Worst Va SDG Ind
	SDG11 Sustainable Cities and Communities	106	A 0 0047 00
	SDG12 Responsible Consumption and Production	n 112	Annex 2 2017-20 Indicator
	SDG13 Climate Action	116	Annau O. Firmera
	SDG15 Life on Land	120	Annex 3 Figures i

SDG16 Peace, Justice and Strong Institutions

SDG17 Partnerships for the Goals

wain	Experiences	134
0	7	
Next	136	
Anne	xes	138
Annex 1	The Target Value and the Worst Value of Lincang's SDG Indicators	138
Annex 2	2017-2022 Lincang's SDG Indicator Data	142
Annex 3	Figures in the Report	144

Annex 4 Tables in the Report

Preface

We're honoured to present *The Implementation of the UN Sustainable Development Goals: Lincang's Voluntary Local Review 2023*, showcasing our vision, actions and achievements in implementing the *2030 Agenda for Sustainable Development* in Lincang.

Lincang is situated in the southwestern border of Yunnan Province, bordering Myanmar between the Lancang River and Nujiang River. The region is home to various ethnic minorities, including Han, Yi, Va, Dai and others who have inhabited the area for generations. Cangyuan Va Autonomous County in Lincang boasts preserved cliff paintings dating back 3,500 years, vividly depicting scenes of the ancestors' efforts to improve their lives while adapting to the environment. Lincang's history, reflected in these paintings, emphasizes the interdependence and mutual influence of people and the environment. Historically, Lincang faced economic and social development challenges due to its rich natural resources being hindered by a closed environment and inconvenient transport. That made Lincang a typical representative of less-developed multi-ethnic region in border areas.

In recent years, Lincang has programmes like a historically significant development opportunity. The construction of the China-Myanmar New Corridor has transformed Lincang from a landlocked and closed area into a crucial hub city connecting China's mainland and the countries in Indian Ocean region. Programmes like the Belt and Road Initiative and the national strategy for the large-scale development of the western region of China, as well as other national strategies, significant progress has been made in modern infrastructure construction, focusing on railroads and highways. That leap forward has overcome bottlenecks that limited the transformation of Lincang's advantageous resources and enhanced its core capacity for leapfrog development.

While celebrating the opportunity, we are fully aware that new opportunities may bring new problems and challenges. Urgent issues include adapting to the external environment, improving openness and communication, advancing the economic development mode, establishing competitive industries, and exploiting the use of unique ethnic resources for in-depth and high-quality development.

In 2019, the State Council of the People's Republic of China approved the construction of a national Innovation Demonstration Zone for implementing the 2030 Agenda for Sustainable Development in Lincang City. That encourages Lincang to explore applicable technical routes and systematic solutions to form an effective model that can be operated, replicated and scaled up. The goal is to exert a demonstrative effect on innovation-driven development in less-developed multi-ethnic borderland areas, providing practical experience for the implementation of the 2030 Agenda for Sustainable Development.

Since then, Lincang has implemented the *Lincang City Sustainable Development Plan* by 2030 and the corresponding construction programmes under the framework of the *2030 Agenda for Sustainable Development* and *China's National Plan on Implementation of the 2030 Agenda for Sustainable Development*. Focusing on bottlenecks such as the weak transformation capacity of its characteristic resources, Lincang has developed and implemented programmes like "accelerating the construction of infrastructure aligned with national strategies", "promoting green industries with equal emphasis on development and protection", "openness and cooperation of border economy", "industry improvement for poverty reduction and rural revitalization", and "ethnic culture inheritance and development".

This year marks the mid-term review of the SDGs, providing us with an opportune moment to evaluate our sustainable development efforts. We aim to assess the effectiveness of our previous work and refine our future development strategies. With this, we are pleased to release the report of *The implementation of the UN Sustainable Development Goals Lincang's Voluntary Local Review 2023*, sharing with the whole society our work, progress, experience gained and challenges faced in the implementation of the 2030 SDGs since 2017, when Lincang City initiated the

construction of the national innovation and demonstration zone for implementing the 2030 Agenda for Sustainable Development. We hope to receive the continued attention and support of all sectors of the society.

We extend our gratitude to the Administrative Centre for China's Agenda 21, the Yunnan Provincial Science and Technology Department, the Chinese Society for Sustainable Development (CSSD), and the China Construction Technology Consulting Co., Ltd. (CCTC) for their generous support in preparing the report. By working on the report, Lincang has acquired the methods to objectively understand the status of SDGs implementation through continuous monitoring and evaluation, applying these insights to future urban development strategies.

During the process, we emphasized the importance of "leaving no one behind". We extend our appretation to the hundreds of local residents and stakeholders who participated directly in preparing the report. Their concrete support and contributions have helped increase and disseminate public awareness of sustainability.

We believe that the release of *The Implementation of the UN Sustainable Development Goals: Lincang's Voluntary Local Review 2023* in Lincang will be an important step in the next phase of Lincang's sustainable development. By 2030, Lincang aims to accelerate its contribution to achieving the goals in the *2030 Agenda for Sustainable Development*, continuing to develop itself into a global model of "innovation-driven development in less-developed multi-ethnic region in border areas".

Mayor of Lincang Municipal People's Government

Du Jianhui

November 2023

Executive Summary

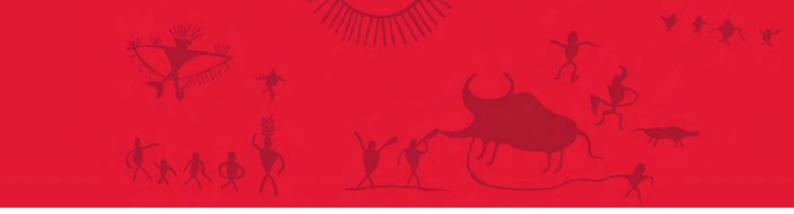
Transforming our world: the 2030 Agenda for Sustainable Development, unanimously adopted by all United Nations Member States in 2015, provides a blueprint for action to achieve peaceful and prosperous development for people and the planet. It has strongly influenced the direction of international and national development policymaking since then. The 2030 Agenda for Sustainable Development (hereinafter 2030 Agenda) encourages Member States to conduct inclusive assessments of progress under national ownership and facilitation.

China attaches great importance to the implementation of the 2030 Agenda and conducted its first Voluntary National Review (VNR) on the implementation of the 2030 Agenda in 2016, releasing *China's National Plan on Implementation of the 2030 Agenda for Sustainable Development*. In addition to the national level, the 2030 Agenda also calls for major groups and stakeholders, including local governments, to voluntarily "report on their contribution to the implementation of the Agenda." Since 2016, subnational governments worldwide have increasingly assessed their progress on the Sustainable Development Goals (SDGs) at the subnational level through the development of Voluntary Local Reviews (VLRs). Since 2020, cities in China such as Guangzhou, Yiwu, and Yangzhou, have released their VLRs.

Lincang City, a typical representative of less-developed multi-ethnic border areas in China, is one of the carriers of the Chinese government's important initiative of "promoting the construction of Innovation Demonstration Zones for the Implementation of the 2030 Agenda for Sustainable Development in China" as proposed in *China's National Plan on Implementation of the 2030 Agenda for Sustainable Development*. The Lincang Municipal People's Government has always been committed to building a healthy, prosperous, inclusive, and vibrant city, where leaves no ethnic group behind, leaves no one behind. As part of our efforts to localise the SDGs, based on Lincang's vision for sustainable development and the SDGs outlined in the 2030 Agenda, and regarding the guidelines for the preparation of VLRs proposed by the United Nations agencies, the VNRs submitted by China, and the VLRs submitted by other cities, we carried out Lincang's voluntary local review.

The Implementation of the UN Sustainable Development Goals: Lincang's Voluntary Local Review 2023 is the first VLR prepared by Lincang City. We aim to review and evaluate Lincang's experience and achievements in the implementation of the SDGs and corresponding indicators since 2017, and to provide practical references for achieving the SDGs at the local level. Through a combination of extensive data collection and in-depth field interviews with various government departments, urban and rural communities, and enterprises, the report compiles, analyzes, and assesses the overall situation of Lincang's response to sustainable development-oriented policies. By combining data analysis and case studies, the report also introduces and demonstrates Lincang City's progress and achievements in the implementation of 16 SDGs, namely No Poverty; Zero Hunger; Good Health and Well-being; Quality Education; Gender Equality; Clean Water and Sanitation; Affordable and Clean Energy; Decent Work and Economic Growth; Industry, Innovation and Infrastructure; Reduced Inequality; Sustainable Cities and Communities; Responsible Consumption and Production; Climate Action; Life on Land; Peace, Justice and Strong Institutions; and Partnerships for the Goals.

The report shows that Lincang City has achieved positive results across the four key task areas: enhancing interconnectivity capacities, fostering environmental-friendly industries, exploiting the potential of unique ethnic resources, and strengthening innovation support. Since 2017, Lincang has experienced substantial progress in establishing a comprehensive transportation network, achieving historic milestones in both highway and railway construction. The development of clean energy production bases, wellness destinations, and high-quality agricultural product bases in plateau areas has yielded remarkable outcomes. Notably, 98.2% of the installed capacity for renewable electricity, primarily hydropower, showcases a significant commitment to clean energy. Efforts in safeguarding and promoting ethnic cultures have also shown positive momentum. In 2022, the item "traditional tea processing techniques and associated social practices in China", including Yunnan black tea (Dian Hong tea) processing, was successfully added to the Representative List of the Intangible Cultural Heritage of Humanity by the United Nations Educational, Scientific and Cultural Organization (UNESCO). The city's focus on enhancing science and technology innovation capacity remains steadfast. The public education system has witnessed continuous improvements, with the



retention rate for nine-year compulsory education reaching 99.04% in 2022. In 2023, the administration rate for the national college entrance examination reached a new pinnacle, underscoring advancements in high school education quality and ensuring breakthroughs in both equality and the overall quality of public education.

The report shows that Lincang City has made progress in 16 SDGs. Between 2017 and 2022, the city demonstrated consistent or gradual improvement in the assessment of 8 SDGs, including Zero Hunger and Good Health and Well-being, collectively accounting for an overall proportion of 50%. As of 2022, 12 out of the 16 reviewed SDGs have been successfully achieved or are on the verge of reaching their target values. Notably, SDG 16 (Peace, Justice, and Strong Institutions) achieved a perfect score of 100. Additionally, among the 85 localised quantifiable indicators, 58 have been accomplished or are nearing their target values.

The report shows that progress on some of the SDGs and indicators is lower than expected. The two SDGs on Industry, Innovation, and Infrastructure, and Partnerships for the Goals have obvious gaps or face serious challenges towards the target values. Several specific indicators have relatively low scores, such as the proportion of output value of high-tech industries above designated size to total industrial output value above the designated size, the number of invention patents per 10,000 people, and the percentage of total import and export to GDP.

The report indicates that Lincang City has made positive progress in the ecological environment, infrastructure, characteristic industries, living environment, social and livelihood, and international exchanges under the conditions of a low economic level, weak industrial foundation, and insufficient elements of modernised governance. The city still faces challenges in further stabilising fiscal support and establishing financing mechanisms; giving full play to its geographic and natural resource advantages and the potential of multi-ethnic culture; enhancing scientific and technological innovation and transformation capabilities, and fully forming an innovation-driven development trend; optimising and adjusting the industrial structure indepth, coordinating the promotion of ecological environmental protection and economic development, and; continuously promoting social security and livelihood improvement.

The results reflect the stage-specific characteristics of Lincang City in forming new advantages and new situations in the process of transitioning from a less-developed border area to catching up and realizing leapfrog development. The report showcases Lincang City's efforts to implement the 2030 Agenda for Sustainable Development and the establishment of a good governance system. It emphasizes Lincang City's practical experience in exploring applicable technical routes and systematic solutions as a less-developed multi-ethnic border area, which holds significance as a reference for other similar regions.

The Implementation of the UN Sustainable Development Goals: Lincang's Voluntary Local Review 2023 is released by the Lincang Municipal People's Government, together with Practices Towards Sustainable Development in Lincang (2023). During the preparation and research process of this report, the Administrative Centre for China's Agenda 21 and Yunnan Provincial Science and Technology Department showed strong care and support. Lincang Municipal Science and Technology Bureau and Lincang Sustainable Development Innovation Centre directly promoted the preparation of this report. Lincang governmental departments, relevant divisions of counties (district), representatives of enterprises, and residents actively supported the data collection and case sharing of the report. Experts from the Chinese Society for Sustainable Development and the China Construction Technology Consulting Co., Ltd., and China National Engineering Research Center for Human Settlements were invited to provide technical support for the finalization of the report.









Figure 1.1 Introduction to Lincang City

1.1 The City of Lincang

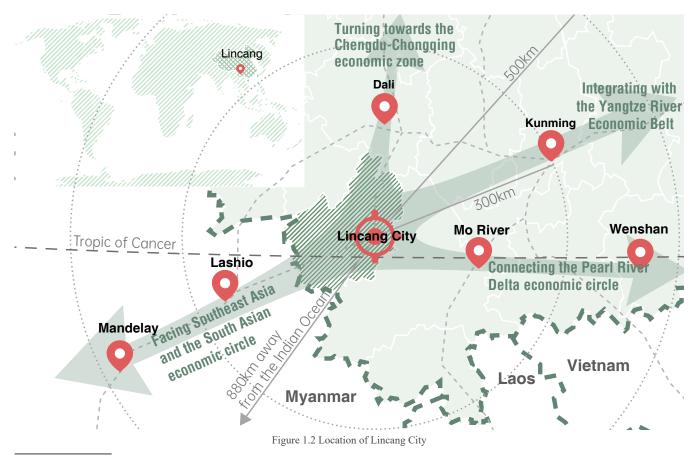
Lincang City is a prefecture-level city in Yunnan Province, China, positioned in the southwestern part of the province. It extends between east longitude 98° 40' to 100° 32' and north latitude 23° 04' to 25° 02', with the Tropic of Cancer traversing its southern territory. To the east, it shares borders with Pu'er City, to the north with Dali Bai Autonomous Prefecture, to the west with Baoshan City, and to the southwest with Myanmar. Nestled between the Lancang River and the Nu River, its name 'Lincang' is derived from its proximity to the Lancang River.

Lincang City plays a crucial role as a node on the Southern Silk Road and the Tea Horse Ancient Road. It serves as the most convenient land passage for China to connect directly to the Indian Ocean through Myanmar. Within the city, Zhenkang County, Gengma Dai and Va Autonomous County, and Cangyuan Va Autonomous County border Myanmar, featuring an approximately 300-kilometre-long border line with 3 open ports, 6 border civilian channels, 4 border trade markets, and 5 roads leading to Myanmar.

Covering a total area of 23,620 square kilometres, Lincang City encompasses 1 district, 7 counties, 77 townships (streets), and 952 administrative villages (communities). The total population is 2.258 million, with 991,500 belonging to various ethnic minorities. Lincang is home to 11 indigenous ethnic groups, including the Yi, Va, Dai, Lahu, Blang, Bai, Lisu, Hui, Miao, De'ang, and Jingpo. Notably, as the cradle of Va culture and recognised as the 'World's Va Hometown,' Lincang hosts a Va population of 244,000, constituting approximately 60% of the Va population in China.

Lincang serves as a significant clean energy base for the national 'West-to-East Electricity Transmission' and 'Yunnan Power Export' initiatives. The Lancang River and Nu River flow through the city's east and west sides, respectively. Three hydropower stations with a million-kilowatt capacity — Manwan, Xiaowan, and Dachaoshan — contribute to the city's role in these energy initiatives. Situated on the 'Three Rivers in Southwest China' mineralisation belt, Lincang holds a quarter of the national germanium reserves, establishing itself as a national high-tech germanium material industrial base.

Lincang serves as the geographical origin and cultivation centre of the world's tea trees. It is China's largest source of raw Pu'er tea, the foremost base for black tea production, and the primary cultivation centre for macadamia nuts. Additionally, it plays a pivotal role as a production base for walnuts, sugarcane, and alcohol in Yunnan Province.



¹ I district and 7 counties refer to Linxiang District, Fengqing County, Yongde County, Zhenkang County, Yun County, Cangyuan Va Autonomous County (referred to as Cangyuan Autonomous County), Gengma Dai-Va Autonomous County (referred to as Gengma Autonomous County), and Shuangjiang Lahu-Va-Blang-Dai Autonomous County (referred to as Shuangjiang Autonomous County).

1.2 Context and Purpose of the Report

Development remains a perpetual theme in human society. In September 2015, President Xi Jinping of the People's Republic of China, along with leaders from across the globe, formally adopted the *Transforming Our World: The 2030 Agenda for Sustainable Development* (hereinafter referred to as the 2030 Agenda) at the United Nations Summit. This agenda outlines development goals for the next 15 years across 17 key areas, including poverty reduction, health, education, and environmental protection, with the overarching aim of creating a sustainable and improved world. Presently, the world confronts numerous challenges such as climate change, environmental pollution, and the ongoing loss of biodiversity. It has become an international consensus to expedite the implementation of the United Nations' 2030 Agenda.

China is one of the earliest and most proactive countries to respond to the UN's 2030 Agenda. In April 2016, the Chinese government released China's Position Paper on the Implementation of the 2030 Agenda for Sustainable Development, demonstrating China's commitment to sustainable development and the serious implementation of the 2030 Agenda. In July, during the United Nations High-Level Political Forum (HLPF) on Sustainable Development held in New York, the Chinese government made its first voluntary national review. The report pointed out that the 2030 Agenda aligns closely with China's goals of building a moderately prosperous society and realizing the Chinese Dream of national rejuvenation. By then, China had made positive progress in strengthening top-level design, enhancing strategic alignment, improving institutional guarantees, achieving early results, deepening international exchanges, and promoting South-South cooperation. In September, the National Plan on Implementation of the 2030 Agenda for Sustainable Development was released, showing that the Chinese government has effectively aligned the sustainable development agenda with its mid-term and long-term national development plans and will adhere to the people-centred development philosophy and follow the development concept of innovative, coordinated, green, open, and shared development. It will actively promote the transformation of the 17 Sustainable Development Goals (SDGs) and 169 targets in the economic, social, and environmental fields. In July 2021, during the United Nations Economic and Social Council HLPF, the Chinese government made its second voluntary national review on implementing the 2030 Agenda, systematically outlining its experiences and practices in five areas, including firm political will, highly aligned development concepts, effective institutional guarantees, extensive social consensus, and close partnerships. Furthermore, it laid out plans to comprehensively implement the 2030 Agenda and promote building a community with a shared future for mankind in conjunction with the Outline of the 14th Five-Year Plan for Economic and Social Development and Long-range Objectives Through the Year 2035 of the People's Republic of China.

In September 2021, President Xi Jinping proposed a global development initiative during the general debate of the 76th UN General Assembly. He called for action-oriented efforts, urging the international community to accelerate the implementation of the 2030 Agenda to achieve a more robust, greener, and healthier global development. The goal was to push global development towards a balanced, coordinated, and inclusive new stage. In January 2022, the "Group of Friends of the Global Development Initiative", initiated by China at the United Nations, was officially launched in New York, providing a new platform for the implementation of the 2030 Agenda. In June 2022, President Xi Jinping hosted the High-level Dialogue on Global Development. Leaders discussed the theme of "Forging High-quality Partnerships for a New Era of Global Development" and reached a broad consensus on strengthening international cooperation and accelerating the implementation of the UN's 2030 Agenda. The global development initiative aligns closely with the 2030 Agenda. The Chinese government's efforts to reinvigorate global action towards achieving sustainable development goals have received positive responses from the international community. By September 2022, over 100 countries and several international organisations, including the UN, have supported the global development initiative, and over 60 countries have joined the Group of Friends of the Global Development Initiative.

Local governments are vital entities for implementing sustainable development goals. When the 2030 Agenda was adopted, UN member countries committed to working closely with local governments, emphasizing their proactive role in promoting sustainable development. Thus, under the call of the international community and national governments, local and regional governments are actively localizing the 2030 Agenda, encouraging them to take specific actions to achieve the sustainable development vision of "leaving no country and no one behind."

The Chinese government places great importance on advancing the 2030 Agenda at the local level through sustainable development topics, contributing Chinese experiences to global sustainable development. In December 2016, the State Council issued *China's Plan of Building Innovation Demonstration Zones for Implementing the 2030 Agenda for Sustainable*



















Development, clearly proposing to create a series of replicable and promotable models for the demonstration of sustainable development. This is to set an example for similar domestic regions and provide Chinese experiences for other countries to implement the 2030 Agenda. As of October 2023, 11 National Innovation Demonstration Zones for implementing the 2030 Agenda for Sustainable Development (hereinafter referred to as Innovation Demonstration Zones) have been approved by the State Council, including Guilin, Taiyuan, Shenzhen, Chenzhou, Lincang, Chengde, etc., each with different demonstration themes.

On May 6, 2019, the State Council approved the proposal of the Yunnan Provincial People's Government and the Ministry of Science and Technology of the People's Republic of China regarding the establishment of an Innovation Demonstration Zone for Implementing the 2030 Agenda for Sustainable Development in Lincang with a focus on "innovation-driven development in less-developed multi-ethnic region in border areas". It was explicitly required that Lincang shall accelerate infrastructure construction aligned with national strategies, promote green industries that balance development and protection, engage in border economic cooperation, enhance industries for poverty reduction and rural revitalization, and preserve and develop ethnic cultures. Through coordinating various innovation resources and deepening institutional reforms, the objective was to explore suitable technical routes and systematic solutions, forming effective, operable, replicable, and promotable models. These models would serve as a demonstration for less-developed multi-ethnic regions in border areas, achieving innovation-driven development and providing practical experience for the implementation of the 2030 Agenda for Sustainable Development.

Lincang City acknowledges that the SDGs serve as the blueprint for a sustainable future. To achieve these goals, it's essential to assess the progress of the SDGs within the jurisdiction of local governments. We have noticed that local governments around the world are assessing the local implementation of the SDGs through the Voluntary Local Review (VLR) method. This is based on the Voluntary National Review (VNR) framework and showcases local government efforts from the perspectives of institutional mechanisms, policy coherence between the SDGs and local development goals, good practices to support local SDG achievement, and sharing of case studies and knowledge.

Cities like Guangzhou, Yiwu, and Yangzhou in China have already submitted their VLRs. However, the 11 cities identified as Innovation Demonstration Zones have yet to share their experiences globally in this manner. Lincang City intends to be the first among these cities to release its VLR, shedding light on its efforts in innovation-driven development in less-developed multi-ethnic borderland areas. After more than one year of research and fieldwork, the VLR of Lincang was completed in November 2023. Through this report, we hope to share with the international community the experiences and progress of Lincang in implementing the 2030 Agenda, providing a useful reference for our city to accelerate the achievement of the SDGs.

This VLR was compiled to document the progress Lincang has made in achieving the SDGs since 2017. Out of the 17 SDGs, Lincang City prioritised 13 goals, including Goal 1 (No Poverty), Goal 2 (Zero Hunger), Goal 3 (Good Health and Well-being), Goal 4 (Quality Education), Goal 6 (Clean Water and Sanitation), Goal 7 (Affordable and Clean Energy), Goal 8 (Decent Work and Economic Growth), Goal 9 (Industry, Innovation, and Infrastructure), Goal 10 (Reduced Inequality), Goal 11 (Sustainable Cities and Communities), Goal 12 (Responsible Consumption and Production), Goal 15 (Life on Land), and Goal 17 (Partnerships for the Goals). These 13 goals were selected based on an analysis of the progress made in achieving the SDGs in the *Lincang City Sustainable Development Plan (2018-2030)*, organised and prepared by the Lincang Municipal People's Government.

During the preparation of this report, the Administrative Centre for China's Agenda 21 (ACCA 21) and Yunnan Provincial Science and Technology Department provided care and support. Relevant governmental agencies and bureaus in Lincang City actively participated in this process: the Lincang Municipal Science and Technology Bureau and Lincang Sustainable Development Innovation Centre directly facilitated the process, 35 municipal government departments and the people's governments of 8 counties (districts) actively supported data collection and case sharing for this report. Experts from institutions such as the Chinese Society for Sustainable Development and the China Construction Technology Consulting Co., Ltd., and China National Engineering Research Center for Human Settlements were invited to provide technical support for the research and preparation of this report.



















1.3 About this Report

The Implementation of the UN Sustainable Development Goals: Lincang's Voluntary Local Review 2023 centres around Lincang City's progress in promoting sustainable development concepts, implementing the 2030 Agenda for Sustainable Development and China's National Plan on Implementation of the 2030 Agenda for Sustainable Development. In this report, using the 17 SDGs as a reference, we've reviewed the policies, objectives, projects, and experiences established by Lincang City to achieve the vision of sustainable development, and assessed the explorations, progress, and challenges since 2017 in achieving each SDG and its specific indicators. Our hope is to share our work on innovation-driven development in underdeveloped multi-ethnic borderland areas with domestic and international counterparts, providing practical experience for implementing the SDGs at the local level.

The report mainly consists of seven chapters.



This Chapter describes Lincang's location, resources, population, and the context and purpose of this report. We hope readers can get to know Lincang, pay attention to Lincang, and understand our intentions and goals for this VLR study.

Chapter 2

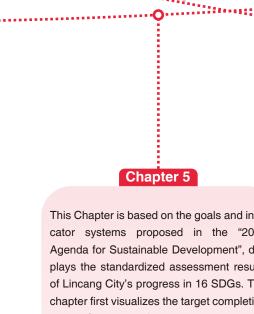
This Chapter outlines the principles, procedures, responsible institutions, data sources, and assessment methodology used to evaluate the progress of the SDGs for this report. To complete this report, the research team compiled and sorted a large number of policy documents, and conducted field visits to representative cases from all one district and seven counties of Lincang City, ensuring the objectivity, credibility, and accuracy of the report.

Chapter 3

This Chapter describes the governance system established and fostered by Lincang City in the field of sustainable development. The report details the collaboration mechanisms formed by national, provincial (Yunnan), and municipal (Lincang) governments at all levels in implementing the SDGs. It showcases the support and attention of various stakeholders to Lincang's sustainable development efforts, introduces the localization efforts of the SDGs, and Lincang's progress and plan. The chapter presents the specific realization of "leaving no one behind" in Lincang, elaborates on the established institutional mechanisms to achieve the objectives, and analyzes some perceived external changes and their potential impact on Lincang's development. A review of the policy and social environment reminds us once again of the complexity and comprehensiveness of the SDGs, as well as the importance of establishing multi-level, cross-departmental government collaboration and broad partnerships.

Chapter 4

This Chapter revolves around the four key tasks identified by Lincang City to achieve the SDGs. These four key tasks include enhancing interconnectivity capacities, fostering environmental-friendly industries, exploiting the potential of unique ethnic resources, and strengthening innovation support. Firstly, we showcased the phased accomplishment of sustainable development assessment indicators proposed by Lincang City using colour codes. Subsequently, we provided a detailed introduction to four key task areas the progress of their projects. By describing the main content, key actions, projects and progress and highlights of each task, we systematically reviewed the efforts made by the entire society of Lincang City to achieve the midand long-term sustainable development goals, further clarifying the direction of future development.



This Chapter is based on the goals and indicator systems proposed in the "2030 Agenda for Sustainable Development", displays the standardized assessment results of Lincang City's progress in 16 SDGs. The chapter first visualizes the target completion status for 2022, the comparison results between 2022 and 2017, and the achievement status of various indicators from 2017 to 2022 in the form of traffic lights. It then introduces the policy response situations, overall completion progress, and analysis results of representative indicators for each target. Moreover, to share the specific actions and practices we took during the promotion process for each target, we added some representative cases in this section. Through the combination of quantitative and qualitative data, we hope to present to readers a more stereo and comprehensive view of Lincang's achievements and challenges. This chapter also provides strong support for us to identify development gaps, stimulate development potential, and clarify the development direction.

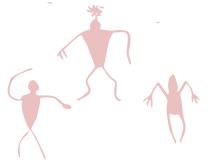
Chapter 6

This Chapter reflects on our path to sustainable development and execution methods, and summarizes the main experiences and innovative practices of Lincang City in promoting sustainable development. We found that establishing government collaboration mechanisms, proposing systemic solutions, developing partnerships, stablelizing broad financial support, and mobilizing enthusiasm for technological innovation are crucial factors for Lincang City's promotion for sustainable development. Meanwhile, we are fully aware of the challenges and opportunities we face.

Chapter 7

This Chapter describes our vision for the future. We are committed to building a healthy, prosperous, inclusive, and vibrant Lincang City, ensuring the rights and well-being of all ethnic groups, and achieving the sustainable development goals outlined in the "2030 Agenda for Sustainable Development". We will continue our efforts to explore and innovate sustainable development models suitable for Lincang City, providing practical references for the development of domestic and international cities who share similar conditions to Lincang.









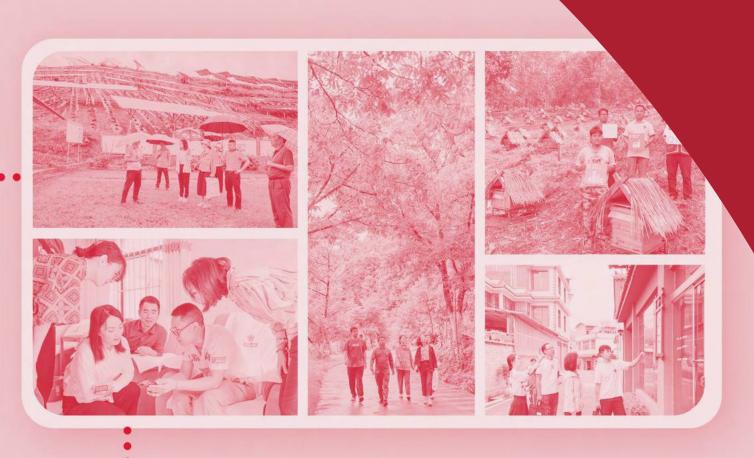








Methodology and Process







2.1 General Principles

This is the first Voluntary Local Review released by Lincang City. The report draws upon the framework and essential elements outlined in the *Global Guiding Elements for Voluntary Local Reviews (VLRs) of SDG Implementation* issued by the UN Department of Economic and Social Affairs (UNDESA), the *Asia-Pacific Regional Guidelines on Voluntary Local Reviews: Reviewing local progress to accelerate action for the Sustainable Development Goals* issued by the UN Economic and Social Commission for Asia and the Pacific (UNESCAP), and other related technical guidelines. Additionally, insights from *China's VNR Report on Implementation of the 2030 Agenda for Sustainable Development* issued by the Chinese government, and other cities' templates have been considered. The report's preparation abides by the following principles.

Principle of Credibility

This report relies on various dependable data sources, including statistical data, administrative information, in-depth interviews, and field research. These sources serve as empirical evidence showcasing the progress in implementing the SDGs and the effectiveness of actions and initiatives in Lincang. Quantitative data are attributed clearly, allowing readers to trace the information back to its source, while qualitative information undergoes verification through field research and stakeholder validation to ensure its credibility and accuracy. By leveraging diverse data sources and undergoing a rigorous validation process, this report aims to present a relatively accurate depiction of the progress and challenges encountered by Lincang in SDGs' implementation.

Principle of Participation

To enhance the level of participation in the VLR report and tackle information barriers, we actively advocated the principle of participation. We conducted in-depth interviews with over 120 representatives from various institutions and individuals, including relevant government agencies, civil society organisations, experts, scholars, and local residents during the report preparation process. The engagement of multiple stakeholders provides the report with information and perspectives from diverse angles, serving as crucial references for the evaluation and the interpretation of case studies. This ensures the report's integrity and representativeness. Moreover, the process has fostered communication among different stakeholders, creating a vital bridge to establish a shared vision of sustainable development in Lincang. The effort strengthens the implementation of the goals and values outlined in the "2030 Agenda for Sustainable Development".

Principle of Readability

To ensure the report is easily comprehensible, we refrain from excessive use of specialised or complex terms. The report is segmented into various chapters and paragraphs, aligning with the international context of the SDGs and incorporating a local narrative that reflects Lincang's developmental journey. It is clearly structured and organised to facilitate understanding for readers with diverse backgrounds. Additionally, the incorporation of charts, images, and other visual tools enhances the presentation of data and information, making the report more engaging and accessible. The approach aims to offer a visible, clear, and comprehensible Lincang VLR report for similar regions in China and the international community. We aspire to attract more readers' attention to the "Lincang experience" of innovation-driven development in less-developed multi-ethnic borderland areas.

Principles for Action

One of the primary objectives of this report is to empower Lincang to take decisive actions in SDG implementation. Drawing on the progress evaluation, the report discusses the effects of Lincang's initiatives through a comprehensive analysis of data, complemented by practical experiences. The practices selected in the report have been demonstrated as feasible, serving as a foundation for Lincang to develop a replicable and scalable model of best practices. Simultaneously, the report's findings serve as a groundwork for pinpointing potential enhancements and outlining countermeasures and strategies. We advocate for stakeholders to proactively address challenges based on this groundwork and to actively advance and enhance corresponding policy initiatives, construction programs, and partnerships through tangible actions. This approach aims to expedite the realization of the SDGs in Lincang City.

2.2 The Process

The VLR process is a systematic undertaking that involves synthesizing policies at the international, national, and local levels, localising the SDGs, collecting, validating, and evaluating data, selecting practices, and visualising the report. It requires coordination of resources from various parties while ensuring the objectivity and reliability of the report. The process unfolds across several stages: planning, selection, data collection, field research, report writing, comments collection, and report submission. It's important to note that these stages involve multi-stakeholder communication and resource coordination, slightly overlapping in time with each other.

Stage 1: Planning

Lincang City, designated as one of the National Innovation Demonstration Zones for the Implementation of the 2030 Agenda for Sustainable Development in 2019, laid a solid foundation for this VLR. Following the pre-evaluation of the construction of Lincang Innovation Demonstration Zone in September 2021, experts recommended initiating the VLR preparation promptly. Responding to this suggestion, the Mayor of Lincang Municipal People's Government committed to the idea, leading to the inception of this report. The Lincang Municipal People's Government collaborated with CSSD and CCTC in the preparation. In August 2022, the Yunnan Provincial Science and Technology Department initiated a project titled "Research on Preparation of Report on Voluntary Local Review of United Nations Sustainable Development Goals Implementation in Lincang." Simultaneously, preparations and research for *Practices Towards Sustainable Development in Lincang (2023)* commenced.

Stage 2: Selection and Localisation of the SDGs

Building upon project planning, the working group benchmarked against the SDGs, considering the international progress of the 2030 Agenda for Sustainable Development, the requirements for the construction of innovation demonstration zones, and the commitments outlined in China's National Plan for the Implementation of the 2030 Agenda for Sustainable Development. This assessment also incorporated the overall requirements of the Lincang City Sustainable Development Plan (2018-2030). With a focus on human settlements, industrial development, and energy resources, the group optimized and screened the indicator system applicable to evaluating the status quo, capacity, potential, and trends of Lincang's sustainable development. The team preliminarily identified 85 localised specific indicators for 16 SDGs, excluding SDG14 "Life Below Water."

Concurrently, Lincang actively participated in the Annual Report of National Innovation Demonstration Zones for Implementing the 2030 Agenda for Sustainable Development and the Evaluation Report of Innovation Capacity of National Innovation Demonstration Zones for Implementing the 2030 Agenda for Sustainable Development, organised by the Department of Science and Technology for Social Development of the Ministry of Science and Technology (MOST) and the Administrative Centre for China's Agenda 21. Lincang also contributed to the National Key R&D Program Project — "Key Technologies for Urban Sustainable Development Evaluation and Decision-Making Support" (2022YFC3802900). This project focused on the localisation and standardisation of SDGs, contributing to the development of urban sustainable development evaluation and monitoring tools and providing valuable data for the preparation of this report.

Stage 3: Data Collection

After the selection and localisation of the SDGs, the work group conducted extensive and in-depth data collection. In addition to the statistical data and administrative information, the team engaged in preliminary research with 27 governmental agencies and bureaus in Lincang by the end of 2022. This effort aimed to gain a comprehensive understanding of the highlights in the implementation of the SDGs, involving a total of 33 hours of interviews and the recording of 462,000 words of transcripts.

Afterwards, the team defined the basic framework of this report, as well as the SDGs regarding the task areas. These areas include enhancing interconnectivity capacities (SDG6, SDG7, SDG9, SDG11, SDG16, SDG17); fostering environmental-friendly industries (SDG1, SDG2, SDG3, SDG4, SDG6, SDG7, SDG8, SDG9, SDG10, SDG11, SDG12, SDG13, SDG15); exploiting the potential of unique ethnic resources (SDG1, SDG4, SDG8, SDG10, SDG11); and strengthening innovation support (SDG2, SDG4, SDG8, SDG9, SDG12). Targeted data collection for these areas involved gathering 463 textual materials, including annual work reports, special plans, action plans, summaries of typical cases, statistical data, etc. Additionally, the team prepared more than 100 case studies to serve as models and practices supporting this report.

Stage 4: Field Research

In the first half of 2023, the work group visited all 7 counties and 1 district in Lincang, conducted field research on more than 60 selected case studies, and engaged in participatory interviews with hundreds of stakeholders involved in enhancing interconnectivity capacities, fostering environmentally friendly industries, exploiting unique ethnic resources, and strengthening innovation support capacity. This process facilitated the acquisition of concrete local knowledge and experience to support the VLR.

Stage 5: Report Writing

Based on the previous steps, the work group began to write the report, which is the core part of the whole project. According to the data collected and the results of the field research, the research team carried out a detailed description and analysis of the progress of the efforts and the challenges faced by Lincang in the implementation of the SDGs.

1 Planning

- The Mayor of Lincang Municipal
 People's Government committed to
 start the VLR process as soon as
 possible.
- The Yunnan Provincial Science and Technology Department initiated a project titled "Implementing the UN Sustainable Development Goals: Lincang's Voluntary Local Review" under the Sci-tech Special Project of the National Innovation Demonstration Zones for Implementing the 2030 Agenda for Sustainable Development.
- The research team officially started the work.

STATE AND ADDRESS OF THE STATE OF THE STATE

2022.8

2 Selection and Localisation of the SDGs

 Selection and localisation of the indicator system for evaluating the status quo, capacity, potential and trend of Lincang in relation to the SDGs.

2022.10

3 Data Collection

- Interviews were conducted with 27
 municipal-level governmental
 agencies and bureaus in Lincang to
 gain a comprehensive understanding of the highlights of each agency.
- Established the framework for the
 VLR and carried out focused data
 collection for relevant areas.





2022.12

Preliminarily determined to include 16 SDGs and 85 localised indicators

33 hours of interviews 462,000 words of transcripts 463 documents 100+ practices 4 Field Research

 Visited all seven counties and one district in Lincang in different working groups, conducted field research on selected key case studies, and conducted participatory interviews with various stakeholders.





2023.4

Conducted field research on over 60 selected case studies and held participatory interviews with hundreds of stakeholders

Stage 6: Comments collection

Upon completion of the first draft, the team realised the need to further ensure its precision, comprehensiveness, and applicability. To this end, the team solicited a wide range of comments from various government agencies and relevant stakeholders in Lincang. Through in-depth exchanges and discussions, these feedback and comments provided important references for further improvement and enhancement of the report, ensuring the content aligns with the actual situation in Lincang and is more operable and practical.

Stage 7: Report Release

Following the compilation of feedback and revisions, the work group thoroughly enhanced and refined the report. In November 2023, the finalised version was officially made available to the public.

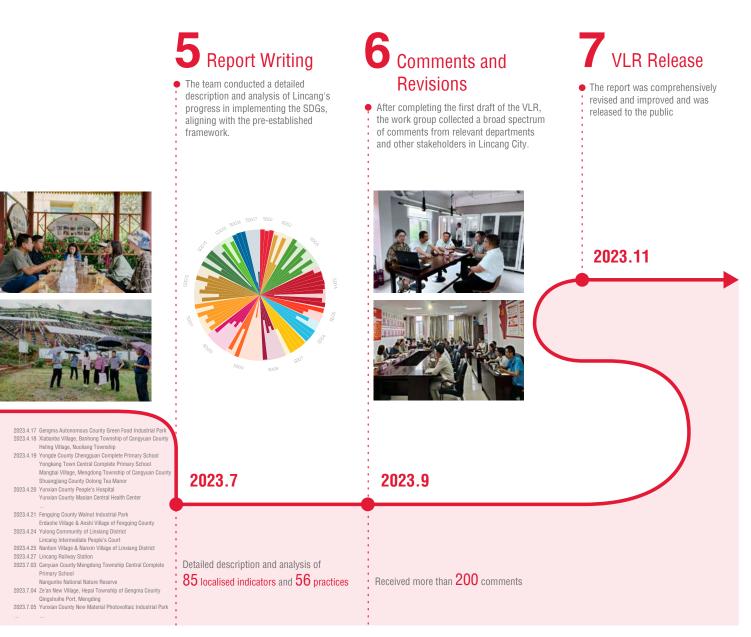


Figure 2.1 The Process of the Implementation of the UN Sustainable Development Goals: Lincang's Voluntary Local Review 2023

2.3 Organisations and References

The Lincang Municipal People's Government is the primary leading organisation responsible for the overall coordination and process planning of the report; the Lincang Municipal Science and Technology Bureau assists the work group in data collection, case studies, comments collection, etc. The work group, consisting of the CCTC, CSSD, Lincang Sustainable Development Innovation Centre, and Lincang Institute of Science and Technology Information, is responsible for data collection, progress evaluation, report writing, and expert consultation. During the process, other governmental agencies and bureaus of Lincang, relevant county-level units, representatives of enterprises, and local residents also offered great support. The above organisations and individuals provided a large amount of detailed and reliable quantitative and qualitative information.

The data of the VLR are primarily come from:

- 1 The data used for the 2023 Annual Report and Progress Evaluation Report for National Innovation Demonstration Zones for Implementing the 2030 Agenda for Sustainable Development, submitted to the Inter-ministerial Joint Conference of National Sustainable Development Experimental Zones by the Yunnan Provincial Science and Technology Department.
- The self-evaluation report of Lincang National Innovation Demonstration Zone for Implementing the 2030 Agenda for Sustainable Development, benchmarking against the *Lincang City Sustainable Development Plan (2018-2030)*.
- The annual economic and social development statistical bulletins from 2012 to 2022 of Lincang Municipality.
- In-depth interviews: In order to gain a comprehensive understanding of the challenges encountered by local authorities and the city in adopting and implementing the SDGs, we conducted interviews with representatives from 27 governmental agencies and bureaus. This effort resulted in 33 hours of audio-recorded interviews and 462,000 words of transcripts. Additionally, we conducted exhaustive field research in all seven counties and one district of Lincang City, delving into more than 60 key case studies and holding participatory interviews with hundreds of stakeholders. These initiatives provided invaluable insights on how to enhance support for local authorities in achieving the SDGs in this report.
- Additional qualitative information: Reports detailing the initiatives of various government agencies in Lincang from 2017 to 2022, accompanied by relevant special plans, action plans, and summaries of practices.
- The data and information in the report are derived from public sources, including relevant ministries, commissions, or other official institutions unless specified separately. The photographs used in the report were either taken by the work group or provided by various departments of the Lincang Municipal People's Government.

Our gratitude extends to the Ministry of Science and Technology of the People's Republic of China, the Administrative Centre for China's Agenda 21, the Yunnan Provincial Science and Technology Department, and the UN-Habitat China Office for their great support.

2.4 Quantitative Evaluation Methods

The indicator system in this report focuses on 16 SDGs: No Poverty; Zero Hunger; Good Health and Well-being; Quality Education; Gender Equality; Clean Water and Sanitation; Affordable and Clean Energy; Decent Work and Economic Growth; Industry, Innovation and Infrastructure; Reduced Inequalities; Sustainable Cities and Communities; Responsible Consumption and Production; Climate Action; Life on Land; and Peace, Justice, and Strong Institutions; and Partnerships for the Goals.

The evaluation aligns with the principles of science orientation, systematic optimisation, universal comparability, and practicality. In Chapter 5, the raw data of 85 localised indicators are standardised by comparing their relative positions between the target value and the worst value. In cases where the determined target value or the worst value is not convenient for directly indicating the results, the optimal value or the worst value will be further processed technically.

Ultimately, the 85 indicators were mapped to a score of 0-100, with higher scores indicating better performance. A detailed description of the target value and the worst value for each indicator is provided in Annex 1.

Methods for determining target values are prioritised in the following order:

- 1. Target values specified in the 2030 Agenda for Sustainable Development.
- Target values based on national planning targets/ national standards.
- Using the average value of the corresponding data for the top five countries with the best performance on this indicator in the UN official report to represent the target value.
- 4. Using the average value of corresponding data for the top five provincial-level administrative regions with the best performance on this indicator in China Statistical Yearbook to represent the target value.

Methods for determining worst values are prioritised in the following order:

- Worst values specified in the 2030 Agenda for Sustainable Development.
- 2. Worst values based on national planning/ national standards.
- Using the average value of the corresponding data for the five countries with the worst performance on this indicator in the UN official report to represent the worst value.
- 4. Using the average value of the corresponding data for the five provincial-level administrative regions with the worst performance on this indicator in China Statistical Yearbook to represent the worst value.

The score for each SDG is the average of all indicators under that Goal. The determination of thresholds aligns with the annual report *China's Implementation of Goal 11 of the 2030 Agenda for Sustainable Development: Blue Book on Urban Human Settlements in China*. A score of 65 or above represents completion or proximity to the target value, indicated in green; 50-65 (including 50) denotes a certain gap to the target value, indicated in yellow; 30-50 (including 30) indicates an obvious gap to the target value, marked in orange; and less than 30 signifies a serious challenge to reach the target value, marked in red. Instances where data are not publicly available or temporarily unavailable, are indicated in grey.

This report assesses Lincang's sustainable development by comparing 2022 scores with those from 2017. Changes greater than 15% (including 15%) indicate stable growth (green), 5-15% (including 5%) suggest slight growth (yellow), -5% to 5% (including -5%) signify stagnation (orange), and less than -5% implies a decrease (red).

Detailed results are presented in Chapter 5.





3.1 Engagement with the National Government on SDG Implementation

The Lincang National Innovation Demonstration Zone for Implementing the 2030 Agenda for Sustainable Development was approved by the State Council. Guided by innovation, it integrates science, technology, and social development to address Lincang's specific sustainable development needs. The goal is to create a replicable model, demonstrating its impact on sustainable development in less-developed areas with multiple ethnic groups domestically, and offering insights for the international implementation of the 2030 Agenda.

The National Innovation Demonstration Zone for Implementing the 2030 Agenda for Sustainable Development, referred to as the Innovation Demonstration Zone, is one of the important initiatives outlined in China's National Plan on Implementation of the 2030 Agenda for Sustainable Development, It serves as a significant measure put forth by the Chinese government to comprehensively promote the implementation of the 2030 Agenda and deeply integrate the innovation-driven development strategy. In September 2016, the Chinese government issued the China's National Plan on Implementation of the 2030 Agenda for Sustainable Development, detailing measures across seven aspects: synergy of strategies, institutional guarantee, social mobilization, resource input, risk management, international cooperation, and oversight and review. It explicitly calls for "the construction of innovation demonstration zones for the implementation of the 2030 Agenda". In December 2016, the State Council issued China's Construction Plan of Innovation Demonstration Zones for Implementing the 2030 Agenda for Sustainable Development (Guo Fa [2016] No. 69). The plan aimed to establish approximately ten innovation demonstration zones during the 13th Five-Year Plan period, forming a number of duplicable and scalable experiences for sustainable development.

In alignment with national policies, the Ministry of Science and Technology (MOST) and other member of the interministerial joint conference of national sustainable development experimental zones issued the Application Guidelines for National Innovation Demonstration Zones for Implementing the 2030 Agenda for Sustainable Development in 2017. The document mandates all provinces (autonomous regions and municipalities) to select areas with the prerequisites for constructing national sustainable development experimental zones and notable achievements. The primary entities for construction should be prefecturelevel cities, closely integrating development with local economic and social decision-making. This involves establishing multi-level and cross-departmental specialised institutional mechanisms, and formulating supporting policies. The application must be submitted jointly by provincial (regional, municipal) governments and the MOST to the State Council. To enhance the demonstrative effects of the action, the Chinese government carefully considered regional development imbalances and diverse sustainable development challenges during the selection process. As of October 2022, the State Council had approved 11 cities in different regions across the country, each with a featured action theme, as the national innovation demonstration zones, including Lincang.

Lincang has rich resources and a strategic geographic advantage. but faces challenges in transforming these resources and addressing economic underdevelopment. Exploiting innovative methods and solutions to leverage the advantages holds significant demonstrative importance for promoting regional sustainable development.

Geographically, Lincang is in the southwest of Yunnan Province, China, sharing an approximately 300-kilometre border with Myanmar and serving as a vital land passage to the Indian Ocean. The region is home to 24 ethnic groups. It has 3 ethnic autonomous counties, and ethnic minority population accounts for 41.4% of the registered population. Lincang experiences a subtropical low-latitude plateau mountain monsoon climate, marked by distinct dry and wet seasons, and has a substantial forest coverage rate of 70.2%. Recognised as a significant hydropower energy base in China, Lincang is also renowned for being one of the geographical origin centre of tea trees and tea culture. Additionally, Lincang, one of the birthplaces of Va culture, reflects a rich tapestry of multi-ethnic coexistence, diverse religions, and the integration of ethnic cultures. Economically, Lincang has established traditional industries centred around

sugar, tea and walnuts, with emerging service sectors. However, challenges persist, including the need for effective transformation of featured resources, delayed adoption of modern economic forms, inadequate development of geographic advantages and infrastructure. Addressing these issues is crucial for the region's sustainable development.

In March 2019, the People's Government of Yunnan Province and the MOST submitted the Request for Instructions on the Construction of the National Innovation Demonstration Zone for Implementing the 2030 Agenda for Sustainable Development in Lincang City (Yun Zheng Bao [2019] No. 13) to the State Council. In May, the State Council approved the establishment request, designating Lincang as a less-developed region with multiple ethnic minorities, driven by innovation in alignment with the 2030 Agenda and China's

national plan of implementation. The guideline emphasises addressing bottleneck problems, such as inefficiency in the transformation of featured resources, and encourages the application of green energy, green and efficient agricultural production, forestation and modern communication technologies. Lincang is instructed to accelerate infrastructure construction in line with national strategies, promote green industries with equal emphasis, engage

in cross-border business cooperation, alleviate poverty through revitalised industries and inheritance of traditions and cultures. Meanwhile, Lincang shall coordinate various resources, deepen system reform, and explore suitable technologies and solutions to become an effective model that can be operated, replicated and promoted in similar regions. It aims to provide practical insights for the implementation of the 2030 Agenda both domestically and internationally.

To facilitate the construction of the Innovation Demonstration Zone, Lincang integrated the 2030 Agenda with existing local mid- and long-term development plans, introducing a specific sustainable development plan with a quantifiable indicator system and support mechanism, taking into account the policy context and Lincang's situation.

To fulfil the tasks outlined in China's National Plan on Implementation of the 2030 Agenda for Sustainable Development, China's Construction Plan of Innovation and Demonstration Zones for Implementing the 2030 Agenda for Sustainable Development and the State Council's approval and other policies, Lincang has formulated two-stage construction plans. These include the Lincang City Sustainable Development Plan (2018-2030) and Lincang's Construction Plan of National Innovation Demonstration Zone for Implementing the 2030 Agenda for Sustainable Development (2018-2020) and Lincang's Construction Plan of National Innovation and Demonstration Zone for Implementing the Agenda for Sustainable Development (2021-2025), outlining the development direction and action path for Lincang City.

Establishing a scientific and reasonable localised target and indicator system is an important step in monitoring and evaluating the progress of local sustainable development. In line with the 2030 Agenda, local governments should do their best to integrate the SDGs into existing policies and plans, priorities and development needs. In the process, global indicators should be localised and monitored, a measurable indicator system should be built and adjusted over time and development status.

Lincang has formulated a measurable and operable sustainable development indicator system as part of the Lincang City Sustainable Development Plan (2018-2030). It includes five primary category, including science and technology innovation, economic development, social development, ecological habitat and characteristic with a total of 30 indicators aligned with the SDGs. The system is developed with reference to the SDGs indicator framework, incorporating measures from China's National Plan on Implementation of the 2030 Agenda for Sustainable Development and requirements outlined in the China's

Construction Plan of Innovation and Demonstration Zones for Implementing the 2030 Agenda for Sustainable Development.

Based on the above, Lincang consistently updates the Yunnan Provincial People's Government and the MOST on its progress. Since 2019, Lincang has incorporated the progress of the Innovation Demonstration Zone in its annual work report. Since 2020, it regularly submits the required materials for the Annual Report on National Innovation Demonstration Zones for Implementing the Agenda for Sustainable Development and the Evaluation Report on Innovation Capacity of National Innovation and Demonstration Zones for Implementing the Agenda for Sustainable Development to the Department of Science and Technology for Social Development of the MOST and the ACCA 21. The practice of building national innovation demonstration zones, including Lincang, was featured in the second China's VNR Report submitted by the Chinese government to the United Nations (Chapter 3 Main experiences) and was included in four Progress Reports on China's Implementation of the 2030 Agenda for Sustainable Development released in 2017, 2019, 2021 and 2023, respectively.

To compile this VLR, the research team conducted a comprehensive, cross-departmental and cross-level review of Lincang's existing policy system and data resources. Through extensive data collection, field research and expert consultations, the team localised the 17 SDGs, 169 targets and 231 indicators outlined in the 2030 Agenda to align with Lincang's own indicator system. Overcoming challenges, the team expanded the understanding of Lincang's current status, leading to the selection of 16 SDGs and 85 localised indicators for the VLR. These indicators are considered relevant, important, available and measurable. The evaluation aims to provide an accurate reflection of Lincang's progress on sustainable development while offering a reference for progress assessment in other cities.

Global SDGs Indicator Database Global indicator framework for the SDGs and targets of the 2030 Agenda for Sustainable Development Removing indicators that cannot be applied to the assessment of sustainable development for cities in China

China's SDGs Indicator Database

- China's National Plan on Implementation of the 2030 Agenda for Sustainable Development
- Lincang City Sustainable Development Plan (2018-2030)
- Series reports of the China's Implementation of Goal 11 of the 2030 Agenda for Sustainable Development: Blue Book on Urban Human Settlements in China

Removing indicators that cannot be applied to

the assessment of sustainable development for cities **Available Data Souces** Removing duplicate indicators and similar

indicators with the same connotation

101 Indicators

Public data by the governments

- Data provided by the governments Data collected by the research

Based on the principles of relevance, importance, availability, and measurement, remove the indicators for which reliable data is not available

85 Indicators



- Percentage of urban residents entitled to minimum living allowance
- Participation rate of basic medical insurance



- Underweight rate among children under-five
- · Agricultural labour productivity
- Qualification rate of sampling inspection of edible agricultural products
- · Grain yield per unit area



- - Reported morbidity rate of notifiable infectious diseases Road traffic death rate
 - Beds of health care institutions per 1000 population
 - · Number of licenced

 - Average life expectancy



- Maternal mortality ratio

- physicians & physician assistants per 1000 persons

 Vaccination rates under the



- · Infant mortality rate

- Programme for eligible children



Consolidation rate of compulsory education

- Enrollment rate of primary school-age children
 - - Enrollment rate of children with disabilities in compulsory education
 - Student-teacher ratio in primary education
 - Student-teacher ratio in junior secondary education
 - People with a junior college degree or above per 100,000 persons
 - Average schooling years of working-age population
 - · Adult illiteracy rate



- Net enrollment rate of primary school-age girls
- Proportion of seats held by women in the Municipal People's Congress and the Chinese People's Political Consultative Conference
- Percentage of women in



- population with sanitary toilet
- Compliance rate for
- centralized drinking water source quality in cities
- Proportion of surface water of Grade III or better quality
- Urban domestic sewage treatment rate

Forest coverage rate

· Ecological quality index (EQI)



- Population with access to electricity
- percentage of total electric power generation
- Coverage of urban population with access to gas



- Average monthly wage of non-private units



- designates size
 Ratio of total Research and
 Experimental Development
 (R&D) expenditure in GDP
 Full-time equivalent of
 Research and Experimental
 Development (R&D)
 personnel per 10 thousand
 persons
- Proportion of output value of high-tech industries above designated size to total industrial output value above designated size
- Invention patents per 10,000 people · Mobile phone popularization



- Urban and rural income ratio
- Engel coefficient of rural
- Engel coefficient of urban households
- · Minimum living allowance in

- Proportion of expenditure for housing security to the general public budget expenditure of local
- Length of public transportation lines per 100,000 persons
- Coverage rate of municipal domestic waste sorting Minimum living allowance in service in communities
 - PM_{2.5} annual average concentration Proportion of days with good air quality in urban
 - Area of public recreational green space per capita
 - · Percentage of areas under construction requirements in built-up area



- Safe disposal rate of industrial

 - Procurement scale of energy-saving and environmental-friendly products as a proportion of the procurement scale of similar products
 - Integrated reuse ratio of common industrial solid
 - Consumption of chemical fertilizers
 - . Pesticide consumption · Effective utilization coefficient of irrigation water
 - Water consumption per 10,000 yuan of GDP



- Number of deaths and missing persons attributed to disasters per 100,000 population
- Greenhouse gas emission intensity per 10,000 yuan of GDP
- Coverage of education and publicity activities on climate change for primary and secondary school students
- Share of non-fossil fuels in primary energy consumption
- Percentage of newly added new energy vehicles to newly added vehicles
- Percentage of green buildings to new buildings



- Renewable energy as a
- Energy consumption per 10,000 yuan of GDP
- Reduction of energy consumption per 10,000 yuan of GDP



- Per capita GDP
- · Overall labour productivity
- Registered unemployment rate in urban area
- Deaths in safety production accident per 100 million yuan GDP



- Coverage of public legal service stations at the township (street)
- Disclosure rate of court trial process information



· General public budget

revenue as a percentage of GDP

Figure 3.1 Schematic diagram of the selection process of Lincang sustainable development assessment indicator system

3.2 Creating Ownership of SDGs and the Voluntary Local Reviews

The comprehension, acknowledgement and engagement of diverse stakeholders are crucial for the ongoing and effectively advancement of the construction of the Lincang National Innovation Demonstration Zone for Implementing the 2030 Agenda.

From a multi-level and cross-functional perspective, the Lincang Municipal People's Government has convened multiple cross-departmental meetings to comprehend, strategize and oversee the implementation of the 2030 Agenda across administrative levels. The city has explicitly formulated a detailed plan for executing national and provincial support policies, encompassing 30 indicators and annual major construction project targets. The construction of the Lincang Innovation Demonstration Zone has been incorporated into the comprehensive evaluation, inspection, and supervision processes of the Lincang Municipal People's Congress and Lincang Municipal Committee of the Chinese People's Political Consultative Conference.

To increase awareness and capacity, the government has carried out diverse initiative, including promotional conferences, lectures and seminars. Additionally, training courses regarding Lincang City as a National Innovation Demonstration Zone have been organised to continuously elevate the awareness and capacity related to sustainable development. Furthermore, the government diligently summarised the experiences, achievements and highlights, actively sharing relevant practices with national agencies and the wider society. Through active participation in tasks, capacity-building efforts, and the recognition of empirical cases, staff across different departments have demonstrated improved initiative and responsibility in contributing to the implementation of the work.

At the public level, following the principle of inclusive participation, contribution and shared benefits, Lincang has leveraged diverse media platforms, such as newspapers, radio, television and the Internet. Through initiatives like press conferences, news interviews, expert interpretations, feature films and publications such as the *Bulletin of the Innovation Demonstration Zone* and activity reports, Lincang has conducted comprehensive dissemination and publicity on the *2030 Agenda for Sustainable Development* and its local implementation.

These efforts highlight Lincang's practical experience in accelerating opening-up, fostering the development of green industry, and advancing ethnic unity and progress. Specifically, six training programmes, including the "Sustainable Development Project", "Modern Farmer" and "Modern Entrepreneur", have been conducted to continuously improve awareness and capacity for sustainable development. Consistent annual events such as the "Science

and Technology Week" and "Science and Technology Worker's Day" further contribute to the awareness-building efforts.

The biodiversity conservation, social governance modernisation and the Innovation Demonstration Zone construction of Lincang are actively introduced through science popularisation, poster display, and information distribution. These initiatives aim to enhance public understanding of the 2030 Agenda, emphasising the interconnections of SDGs and the construction of Lincang Innovation Demonstration Zones with individual and societal interests. This approach encourages broad participation across society, creating a positive social atmosphere for the implementation of the 2030 Agenda.

In terms of partnership building, Lincang actively collaborated with research institutes such as the Chinese Academy of Sciences, the Chinese Academy of Engineering, China Agricultural University and Huazhong University of Science and Technology, successfully held two "Academician's Tour to Lincang" events and signed cooperation agreements. Besides, Lincang established international sister city relations with Dubna City of Russia, Gambol City of Sri Lanka, Lashio City of Myanmar and Khoueng Keb of the Kingdom of Cambodia. In addition, Lincang continues to promote international cooperation and exchanges with Myanmar and other countries. It organised the Inaugural Conference of Alliance of Poverty Reduction and Development & International Conference of Global Poverty Reduction and Development, along with the International Macadamia Annual R&D Conference & Lincang Nuts Culture Festival. Lincang also successfully held four Myanmar (Lashio) -China (Lincang) Border Economic and Trade Fairs, ten Asian Micro Film Arts Festivals and the first Lincang Overseas Chinese Association from Hundreds of Countries. These initiatives have expanded the influence of the implementation of the 2030 Agenda for Sustainable Development in Lincang.

Taking the opportunity to prepare the VLR report, the work group engaged in extensive and in-depth discussions with personnel from diverse government departments, business representatives, and local residents' representatives. Numerous organisations and individuals offered detailed information and insights for the VLR preparation, ensuring a solid foundation for data analysis and case studies. That collaborative effort underscores the commitment and support of Lincang's society for sustainable development.

3.3 Incorporation of the Sustainable Development Goals in Local Frameworks

Promoting local sustainable development is a complex and systematic project. Effectively connecting localised SDGs and targets with existing regional and local development policy systems is essential to ensure the coordinated advancement of the international agenda and national strategies during the process.

When formulating China's National Plan on Implementation of the 2030 Agenda for Sustainable Development, the Chinese government effectively aligned the 2030 Agenda with the national medium- and long-term development plans and strategies. In sync with the Outline of the 14th Five-Year Plan (2021-2025) for National Economic and Social Development and the Long-Range Objectives Through the Year 2035, China is committed to implementing the sustainable development strategy and actively promoting the 2030 Agenda. Various ministries and departments have also formulated strategic plans in corresponding areas. For example, in the realm of economic development, strategies such as the Outline of the National Innovation-Driven Development Strategy, the National Agriculture Sustainable Development Plan (2015-2030), and the Outline of the National Strategy of Informatization Development have been formulated. In the domain of social development, China has issued policies documents such as the Decision on Winning the Battle Against Extreme Poverty, the National Rural Vitalization Strategic Plan (2018-2022), the Outline of Healthy China 2030, and the 14th Five-Year Plan for Agricultural and Rural Modernization. Regarding the environment, China has formulated the China National Biodiversity Conservation Strategy and Action Plan (2011-2030), the National Plan on Climate Change (2014-2020), the National Strategy for Climate Change Adaptation 2035, and the Integrated Reform Plan for Promoting Ecological Progress.

Yunnan Province has implemented a policy system to guide its regional development in alignment with the national strategies as well as the 2030 Agenda. The province has issued key medium- and long-term policy documents, including the 14th Five-Year Plan for National Economic and Social Development of Yunnan Province and the Outline of Long-range Objectives Through the Year 2035. Other notable plans include the 14th Five-Year Plan for Modern Agriculture Development with Plateau Characteristics, the 14th Five-Year Plan for Rural Development of Digital Agriculture, and specific strategies such as the Implementation of the National Innovation-Driven Development Strategy in Yunnan Province, the Plan of Yunnan Province for Building China's Ethnic Unity and Progress Demonstration Zone (2016-2020), and Accelerating the Construction of China's Radiation Center for South Asia and Southeast Asia, etc.

We also observed that since the launch of the 2030 Agenda in 2015, significant and intricate changes have unfolded in both international and domestic contexts. Globally, politics, the economy, science and technology, and industry

are undergoing profound transformations, leading to an increasingly complex international environment. Challenges such as geopolitical conflicts, climate change, energy and food crises are interwoven, posing unprecedented threats to the global progress towards sustainable development. Meanwhile, China has made substantial progress in economic strength, scientific and technological capabilities, overall national power and improved living standards, transitioning to a stage of high-quality development. Yet, issues related to unbalanced and inadequate development persist, revealing new trends in its economic and social development. Promoting post-epidemic economic recovery, achieving carbon peak and carbon neutrality, and actively implementing global development initiatives have become urgent needs for sustainable development during the 14th Five-Year Plan period.

Lincang City has successfully integrated the implementation of the 2030 Agenda, national and regional policies with its own policies, aligning with the construction of the existing rural revitalization demonstration zone and the demonstration zone for the prosperity of the border area. Adapting to domestic and international situations, Lincang has reviewed and revised its development strategy and implementation path. In the initial phase of establishing the Innovation Demonstration Zone, centred on the theme of "innovationdriven development in less-developed multi-ethnic borderland areas", Lincang formulated the Lincang City Sustainable Development Plan (2018-2030) and Lincang's Construction Plan of National Innovation Demonstration Zone for Implementing the 2030 Agenda for Sustainable Development (2018-2020) (hereinafter referred to as the Construction Plan (2018-2020)). During the construction, Lincang has made outstanding achievements in poverty alleviation, rural revitalization, industry upgrading, border economic opening and cooperation, and green industry promotion. Specifically, the city achieved historic leaps in comprehensive transportation and poverty alleviation. The launch of the China-Myanmar sea-highway-railway intermodal transportation channel in 2021 also marked a milestone in opening up to Myanmar. Responding to the new circumstances, Lincang has amended the Lincang City Sustainable Development Plan (2018-2030) and formulated a new construction plan, namely, Lincang's Construction Plan of National Innovation Demonstration Zone for Implementing the 2030 Agenda for Sustainable Development (2021-2025) (hereinafter referred to as the Construction Plan (2021-2025)).

Focusing on the sustainable development vision, Lincang has identified four key task areas: enhancing interconnectivity capacities, fostering environmental-friendly industries, exploiting the potential of unique ethnic resources, and strengthening innovation support. The city has formulated development targets and progress plans for 2025 and 2030, respectively.

The overarching vision of the Lincang City Sustainable Development Plan (2018-2030) is as follows: focusing on the implementation of the 2030 Agenda, addressing the bottleneck challenges that limiting the sustainable development of Lincang by actively exploring the innovationdriven solutions. The plan emphasises experiments in openness and sharing, green economy, coordinated development, and innovative technologies and solutions. While accelerating the construction of the Innovation Demonstration Zone, Lincang aspires to become a pilot zone for the release of new growth drivers in all-round border opening, a model zone for the leapfrog development of environmentally friendly industries, and a leading zone for the high-quality utilization of featured ethnic resources. The plan seeks to establish an effective model that can be operated, replicated and promoted, and provide valuable insights for similar regions worldwide.

Focusing on addressing Lincang's challenges such as weak and unbalanced development, insufficient industrial and innovation capacity, and the imperative for sustainable development across social, economic and environmental

aspects, Lincang has identified four key task areas:

- Comprehensively enhancing interconnectivity capacities to build an open and inclusive Lincang;
- Vigorously fostering environmental-friendly industries to build Lincang as a city with prosperity and shared wealth;
- 3. Fully exploiting the potential of featured ethnic resources to build a rich and beautiful Lincang;
- 4. Effectively strengthening the level of innovation support to build a new Lincang with vitality.

According to the task ares and objectives of the city's sustainable development plan, the Construction Plan (2021-2025) has outlined 91 projects in five areas: the promotion of regional opening and cooperation, the implementation of the rural revitalization strategy, the protection and inheritance of ethnic culture, the construction of ecological civilization pilot zones, and innovation-driven and high-quality development. Lincang City has adopted an action-oriented approach, formulating development goals and progress plans for both 2025 and 2030. The construction plan also set annual performance assessment indicators by 2025.

By 2020

Achieve concurrent advancements in building a moderately prosperous society, synchronised with the development of the entire province and the country. Make notable progress in border area openness, green development, infrastructure construction, and inheritance of traditions and cultures.

By 2025

The capacity to transform characteristic resources is significantly enhanced, resulting in a substantial improvement in the level of sustainable development. The successful establishment of ethnic unity and progress demonstration zones, along with the radiation centre for South and Southeast Asia, is achieved. Continuous enhancements in ecological protection, environmental quality, and resource utilisation efficiency are pursued. Moreover, a variety of models and practices that are replicable and scalable are developed.

By 2030

A pilot zone for the releasing new growth drivers in border openness, a model zone for the leapfrog development of environmentally friendly industries, and a leading zone for the high-quality use of featured resources are being initially established. The construction of National Innovation Demonstration Zone for implementing the 2030 Agenda is driving the local development. A well-developed model that is operable, replicable, and promotable, serving as a reference for regions in less-developed border areas with multiple ethnic groups, is being formed.

Key Tasks Areas

- -Enhancing Interconnectivity Capacities
- -Fostering Environmental-Friendly Industries
- -Exploiting the Potential of Unique Ethnic Resources
- -Strengthening Innovation Support

Construction Plan (2018-2020)

- Speeding up infrastructure construction
- Green industry promotion
- Border economy open up and cooperation
- · Poverty alleviation and rural revitalization industry upgrading
- Inheritance and development of ethnic culture

Construction Plan (2021-2025)

- Promotion of regional open up and cooperation
- · Implementation of the rural revitalization strategy
- Protection and inheritance of ethnic culture
- Construction of ecological civilization pilot zones
- Innovation-driven and high-quality development

Figure 3.2 Lincang City's Roadmap for Implementing the 2030 Agenda for Sustainable Development

3.4 Institutional Mechanism

In terms of the institutional mechanism, Lincang is guided by the key actions proposed in the sustainable development plan and construction plan. It clearly defines the responsible units within five major action groups. Guided by the progress evaluation of the Innovation Demonstration Zone, it further breaks down the responsibility entities for related indicators and key projects.

Following the adoption of the 2030 Agenda, the Chinese government took the initiative to establish a working mechanism to ensure its effective implementation. In 2016, an interministerial coordination mechanism for the implementation of the 2030 Agenda was formed, comprising 45 ministries and commissions. The implementation of the 17 SDGs and 169 indicators was assigned to various ministries and commissions. This necessitates governments at all levels to assume the main responsibility, requiring not only enhanced cross-sectoral and cross-departmental coordination, but also ensuring the implementation of policies across government levels. An effective implementation mechanism spans the "central-local-primary" levels. For the construction of Innovation Demonstration Zones, a diversified institutional mechanism is established, led by the MOST, coordinated by an Inter-ministerial Joint Conference, with local governments as the main party for construction and broad public participation.

To ensure the seamless implementation of the construction plan and advance the construction in alignment with existing strategic arrangements, Yunnan Province established a leading group for the construction of the National Innovation Demonstration in Lincang, headed by the provincial government leader in charge of science and technology. In parallel, Lincang formed led by the main leaders of the municipal Party committee and the municipal government. This group is tasked with studying and deciding on major innovation matters, coordinating the formulation of innovation policies and measures. The leading group has issued the Working Protocol for the Construction of the Lincang National Innovation Demonstration Zone for Implementing the 2030 Agenda for Sustainable Development. To facilitate the development, Lincang established the "five major actions" working groups and a support working group, all led by the municipal-level leaders. Detailed implementation plans were formulated based on the principle of "one action, one working group, one main leader, one leading department, and one implementation plan". Regular scheduling, special supervision, performance assessment of targets, promotion and publicity initiatives were set up. Additionally, Lincang established a reporting system to the provincial government every six months, reporting to the MOST and the Inter-ministerial Joint Conference annually, and providing progress reports to the national ministries and commissions more than once a year through municipal departments. This framework strengthens the implementation of the annual plan and the execution of major projects. It guides all departments and counties (districts) in their work, collectively promotes the innovative development of Lincang, thus consolidating the city's efforts to promote the highquality construction of Lincang Innovation Demonstration Zone.

According to the Construction Plan (2018-2020) and the scheme of major action working groups, the Municipal Transportation

Bureau is responsible for accelerating infrastructure construction, the Municipal Development and Reform Commission oversees the action group for promoting green industry, and the Municipal Bureau of Commerce manages the action group for promoting border economic openness and cooperation, the Municipal Agriculture and Rural Affairs Bureau leads the action working group for poverty alleviation and rural revitalization, while the Municipal Culture and Tourism Bureau heads the working group for promoting ethnic culture inheritance and development.

In the Construction Plan (2021-2025), leadership of action working groups has been reassigned. the Municipal Development and Reform Commission now leads the regional opening up and cooperation, the Municipal Rural Revitalization Administration oversees the rural revitalization strategy implementation, and the Municipal Culture and Tourism Bureau heads the ethnic culture protection and inheritance action working group, the Lincang Ecology and Environment Bureau leads the action working group for the construction of ecological civilization pilot zone, and the Municipal Science and Technology Bureau heads the working group for innovation-driven high-quality development, and the Municipal Investment Promotion Bureau leads the financing and investment working group, the Municipal Finance Bureau leads the funding support group, the Publicity Department of the Municipal Party Committee leads the publicity and promotion working group, and the Municipal Party Committee office leads the inspection and performance assessment working group.

In addition, Lincang has issued the Detailed Task Plan for Assessment Indicators of Building the National Innovation Demonstration Zone for Implementing the 2030 Agenda for Sustainable Development in Lincang. The plan delineates the responsibilities of the 30 indicators included in the city's planning goals, covering five aspects: science and technology innovation, economic development, social development, ecological habitat and characteristic indicators. The task plan provides detailed designations of the responsible units for each indicator. For example, concerning science and technology innovation, the Lincang Municipal Science and Technology Bureau is accountable for the indicator of investment intensity of the whole society and experimental development funds, with involvement from various departments including the county (district) people's government, the Municipal Industry and Information Technology Bureau, the Municipal Physical Education Bureau, the Municipal Finance Bureau and the Municipal Agriculture and Rural Affairs Bureau. This commitment to responsibility is also evident in the implementation of key projects outlined in the construction plans. As an illustration, the Dali to Lincang Railway project, a crucial component of the action for infrastructure construction related to the national strategy, clearly specifies the undertaking unit is the Lincang Local Railway Development Bureau, as per the list of 99 key projects listed in the Construction Plan (2018-2020).

In terms of supporting policies, Lincang has established a policy system, guided by national policies and supplemented by specific and local policies, to facilitate the construction of the Innovation Demonstration Zone.

The MOST, relevant ministries, commissions and provincial government, have offered strong support for the construction of Innovation Demonstration Zone, encompassing science and technology support, policy measures, and publicity. In August 2019, the Yunnan Provincial Government issued the Notice of the General Office of the Yunnan Provincial People's Government on Issuing Several Policies to Support Lincang in Building a National Innovation and Demonstration Zone for Implementing the Agenda for Sustainable Development (hereinafter referred to as "Several Policies") to support Lincang's development. These policies, spanning finance, science and technology innovation, rural revitalization and opening up, introduce 12 policies measures. Notably, the "Several Policies" clearly outlined an annual allocation of 200 million Chinese yuan from 2020 to 2022 as financial subsidies. Additionally, an annual 50 million Chinese yuan from the provincial science and technology fund was designated for science and technology innovation in the Innovation Demonstration Zone. The Provincial Science and Technology Department also established a special project specifically for the national Innovation Demonstration Zone.

With the support of the central government and the Yunnan Provincial Government, Lincang City issued ecological protection policies such as the Regulations on the Protection and Management of the Nanting River in Lincang, the Regulations on the Protection of the Ancient Tea Trees in Lincang, the Regulations on the Protection of the Centralised Drinking Water Source in Lincang, and the Implementation Measures for the Protection of the Ancient Tea Tree, "the Splendid Ancestor of Tea", in Lincang. These measures included the demarcation of 104 centralised drinking water source protection areas in the city, reinforced protection of ancient tea tree resources, and promoted resource development, environmental protection and sustainable development in the Nanting River basin. Furthermore, Lincang formulated a series of science and technology and talent support policies, such as Several Policies for Science and Technology to Support the Construction of the National Innovation Demonstration Zone for Sustainable Development, Measures for the Introduction of High-Level Talents in Lincang (Trial), and Selection Measures for "Cangjiang Famous Masters", "Cangjiang Famous Craftsman", "Cangjiang Famous Doctors" in Lincang. These policies serve as a robust guarantee for the development of science and technology innovation and contribute to the vitality in the region.



3.5 Leaving No One Behind

"Leaving no one behind" is a fundamental principle of the 2030 Agenda for Sustainable Development, and its implementation at the city level represents a commitment on how to strengthen equality and inclusiveness at the city level and reduce the inequalities and vulnerabilities that leave some individuals or groups behind. In the construction of the innovation demonstration zone, Lincang adheres to the people-oriented principle of "leave no ethnic group behind, leave no one behind", pays attention to the health, well-being and participation mechanism of all groups in the process of social governance, and makes efforts to eliminate inequality.

3.6 Structural Issues

To achieve local sustainable development, it is necessary to pay attention to the coordinated development of environmental, economic and social factors within the social system. Understanding structural issues or obstacles in the process of achieving the SDGs is crucial for the establishment of the Lincang Innovation Demonstration Zone. This VLR reviews the significant changes and their impacts on Lincang's development, from the perspective of implementation efforts, providing valuable insights for future work.



The international environment is becoming increasingly complex and uncertain, posing challenges to the implementation of high-level opening-up. Lincang City's modern infrastructure network, characterised by interconnectivity, complete functions, high efficiency, and safety assurance, is not yet fully completed. Policy constraints related to external-openness, such as the expansion of the Qingshui River Port, remain unresolved. The China-Myanmar sea-highway-railway intermodal transportation has not yet achieved normal operation, and the geographic advantages of the port have not been fully realised. An all-encompassing, multi-tiered and comprehensive pattern of opening-up has yet to materialise.



Economic globalisation is facing headwinds, marked by rising instability and uncertainty in economic growth. Lincang remains a less-developed area with a fragile development foundation, a modest economic scale, and limited groundwork for high-quality development. The untapped potential of featured resources has not been fully leveraged for development. Challenges persist in the financial situation and implementation of projects supported by public finance. There are still gaps in fully capitalizing on border advantages, resource potential, and the cultural richness.



Insufficient capacity to participate in the new round of scientific and technological revolution and in-depth industrial development. Lincang faces challenges in promoting comprehensive innovation with science and technology at its core. There is a lack of industrial support, insufficient introduction and training of talents, especially high-end talents, weak research and development motivation, and limited innovation capacity within local enterprises and scientific research institutions. The technology transfer is difficult, and the trend of innovation-driven development has not fully taken shape.



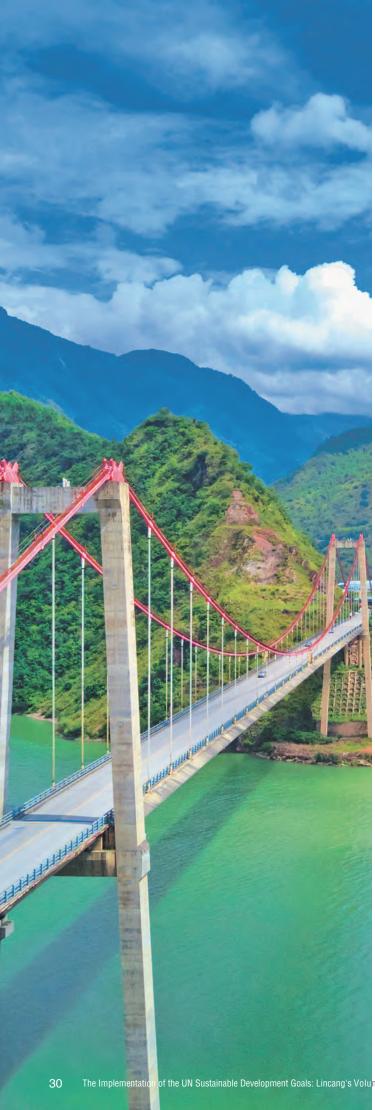
Urbanisation, an aging population and diversified employment methods have accelerated, yet gaps persist in the construction of the social security system. Lincang still faces challenges in achieving balanced development in education and healthcare. Issues include a shortage of high-quality labour resources to support industrial modernisation and difficulties in establishing a comprehensive social welfare system, particularly for high-level senior care services. Ensuring and improving people's well-being remains challenging.



Climate risks are intensifying, underscoring an urgent need for coordinated development between economic, social, and environmental aspects, considering population, resources and the environment. Lincang City's ecological environment is relatively sensitive and fragile, yet there is insufficient integration and mutual promotion of natural, physical, human and social capital. Shortcomings persist in coordinating ecological environment protection with economic development, achieving in-depth optimisation and adjustment of the industrial structure, and promoting a comprehensive green transformation.







4.1 Performance of Sustainable Development **Indicators**

The Lincang City Sustainable Development Plan (2018-2030) outlines specific indicators aligned with the city's context and phased targets for 2020, 2025 and 2030 across five dimensions: scientific and technological innovation, economic development, social development, ecological habitat and characteristic indicators. The VLR evaluates Lincang's performance of these indicators in 2020 and 2022, using colour labels to signify the degree of achievement.

The colour-coded system is as follows:

- Red indicates a significant gap with the target value (less than 60% of the target or no better than 2017).
- Orange indicates a moderate gap with the target value (60-80% of the target).
- Yellow indicates that the target is essentialy achieved (more than 80% of the target).
- Green indicates that the target has been achieved or surpassed.
- Grey indicates missing or incomparable data.

The overall performance in Lincang City is relatively positive. In 2020, out of 29 disclosed indicators, 24 were outperformed or essentially achieved. Notable achievements include the contribution rate of scientific and technological progress, per capita GDP, incidence of poverty, forest coverage rate, and output value of green energy, with 19 indicators in green and 5 in yellow. However, indicators like the surveyed urban unemployment rate and total imports and exports, showed a certain gap, indicated in orange. 3 indicators, including the ratio of total R&D expenditure in GDP, the number of tourist visits, and the output value of healthy life destinations, were not completed (red). 1 indicator lacked comparable data.

In 2022, among 23 disclosed indicators, 22 were outperformed or essentially achieved, with 15 in green and 7 in yellow. Only 1 indicator, the number of invention patents per 10,000 people, fell short (red). Due to the limitations of the report's preparation period and statistical measurements adjustments, 7 indicators lacked statistics or had undisclosed data.

From 2017 to 2022



Scientific and Technological Innovation Indicators

Despite positive progress in indicators such as the number of china's national high-tech enterprises and the average schooling years of the working-age population, the performances of other indicators, such as the number of invention patents per 10,000 people, remains significantly below the planed targets. The results indicates that Lincang City faces substantial challenges in terms of funding investment in scientific and technological innovation and technology transfer.



Economic Development Indicators

The overall outcome is positive. All statistical indicators have been met, except for the ratio of the output value of agricultural product processing to the total agricultural output value, which fell short of the annual target. The results suggests that in the future, Lincang should further highlight the advantages of agricultural production, explore opportunities in the deep processing of agricultural products, extend the industrial chain, increase added value, and promote the development of the agricultural product processing industry.



Social Development Indicators

More than three-quarters of the indicators have been achieved or are close to being achieved. Indicators such as per capita disposable income of urban and rural residents and average life expectancy continue to show improvement. However, the surveyed urban unemployment rate still lags behind the target. The results indicate that Lincang should continue efforts to enhance the overall quality of living environments and social well-being.



Ecological Habitat Indicators

The overall performance is excellent. Except for the performance of the indicator of green covered area as percentage of built-up area, which was basically achieved due to the rapid expansion of the built-up area in Lincang City, the rest of these indicators have achieved or outperformed compared with target values. The results show that Lincang City has made positive progress in strengthening environmental governance, promoting energy conservation and emission reduction, and building a beautiful Lincang, and that Lincang has achieved good results in practicing the concept of prioritizing ecological protection and green development.



Characteristic Indicators

Performance of indicators such as total imports and exports and the number of tourist visits declined with fluctuation around 2020 but showed a rebound in 2022. Although installed capacity of power generation did not meet expectations, that of installed green power in Lincang accounted for more than 98% in 2022, which provided important support for the development of green energy. The results suggest that Lincang should keep exploring the path of transforming advantageous resources into development advantages.

Table 4.1 Performance of Sustainable Development Indicators of Lincang City

Primary Indicators	Secondary Indicators	2017	2018	2019	2020	Target Value in 2020	Performance in 2020
	Growth rate of total Research and Experimental Development (R&D) expenditure (%)**						
	Number of china's national high-tech enterprises**						
scientific and	Volume of transaction in technical markets (100 million yuan)**						
	Invention patents per 10,000 people**						
technological innovation	Average schooling years of working-age population (year)	10.5	10.7	10.9	11.0	11.0	•
iiiiovatioii	Ratio of total Research and Experimental Development (R&D) expenditure in GDP $(\%)^{\star}$	0.40	0.37	0.37	0.30	1.00	•
	Contribution rate of scientific and technological progress (%)*	47.5	48.0	48.5	49.0	49.0	•
	Proportion of citizens with scientific literacy (%)*	3.7	5.0	6.0	7.0	7.4	•
	Per capita GDP (10,000 yuan/person)	2.39	2.66	2.99	3.63	3.30	•
	Ratio of the output value of agricultural product processing to the total agricultural output value **						
	Number of market entities (%)**						
	Growth rate of investment in fixed assets (%)	28	25	26	20	20	•
economic	Energy consumption per 10,000 yuan of GDP (tec/10,000 yuan)	ND	ND	ND	ND	ND	•
development	Water consumption per 10,000 yuan of GDP (t/10,000 yuan)	132.7	127.3	123.7	121.3	123.0	•
	Integrated reuse ratio of common industrial solid wastes (%)	90.04	73.27	73.88	85.44	≥ 63	•
	Utilization ratio of agricultural waste (%)	74.29	78.81	80.74	85.17	85.00	•
	Certified area of green food, organic products, pollution-free agricultural products, and agricultural products with geographical indications (10,000 mu) ¹	626.90	887.00	904.70	940.94	920.00	•
	Proportion of the added value of the tertiary industry of GDP (%)*	47	49	47	45	40	•
	Proportion of the expenditures on people's livelihood of general public budgets (%)	81.78	81.80	83.70	82.00	80.00	•
	Per capita disposable income of urban residents (yuan)	25,056	27,161	29,524	30,794	32,300	•
	Per capita disposable income of rural residents (yuan)	9,814	10,756	11,907	12,824	13,061	•
	Average life expectancy (year of age)	73.61	73.47	74.01	74.62	76.50	•
social	Coverage Rate of Rural Population with Sanitary Toilet (%) ²	56.00	60.00	70.00	55.30	80.00	•
development	Coverage Rate of Rural Population with access to tap water (%)	79.11	83.36	89.43	91.20	82.00	•
	Surveyed urban unemployment rate (%)	3.67	3.47	3.25	3.56	3.30	•
	Growth rate of overall labour productivity (%)**						
	Elderly care beds per 1,000 elderly population*	28	32	33	35	35	•
	Incidence of poverty(%)*	5.05	0.81	0	0	0	•
	Forest coverage rate (%) ³	65.55	66.72	68.48	70.20	70.00	•
	Proportion of days with good air quality in urban area (%)	98.1	98.4	97.8	99.5	98	•
ecological	Reduction of CO2 emission per unit of GDP(%)**						
habitat	Proportion of surface water of Grade III or better quality(%)	100	100	100	100	100	•
	Green covered area as percentage of built-up area(%)*	40.71	41.13	40.29	40.15	41.00	•
	Total imports and exports (100 million yuan)	52.75	54.94	60.74	54.88	80.00	•
characteristic	Number of tourist visits (10,000 persons-time)	1,856.92	2,546.26	3,180.84	1,882.15	3,566.00	•
	Installed capacity of power generation (10,000 kW)**						
	Proportion of the middle-income group of the total population (%)**						
indicators	Output value of green energy (100 million yuan)*	35.00	37.00	39.70	50.80	50.00	•
C	Output value of green food (100 million yuan)*	300.00	327.00	355.00	400.00	400.00	
	Output value of healthy life destinations (100 million yuan)*	157.00	285.00	414.10		540.00	
	Culput value of fleating the destinations (100 million yuan)	107.00	200.00	414.10	244.15	340.00	

Note 1. 10000 mu = 666.67 hectares

^{2.} The statistical indicator "Coverage Rate of Rural Population with Hharmless sanitary toilets popularization rate in rural areas" for 2017-2019 was modified to "Coverage Rate of Rural Population with Sanitary Toilet Sanitary toilets popularization rate in rural areas" in 2020, involving a change in the algorithm. Consequently, it is not comparable to the target value.

^{3.} In 2021, the results of national forest resource management were integrated with the outcomes of the Third National Land Survey. This led to a change in the criteria for classifying the land types included in forest coverage rate statistics, making it not comparable to the target value.

2021	2022	Target Value in 2022	Performance in 2022	Target Value in 2025	Target Value in 2030	Data source(s)
4.33	\	17.00	•	17.00	17.00	The Lincang Municipal Bureau of Science and Technology
18	26	22	•	35	50	The Lincang Municipal Bureau of Science and Technology
3.0	3.1	3.0	•	6.0	11.0	The Lincang Municipal Bureau of Science and Technology
).44	0.25	0.49	•	0.63	0.82	Lincang Administration for Market Regulation
0.6	10.7	10.7	•	11	12	Lincang Municipal Education and Sports Bureau
						The Lincang Municipal Bureau of Science and Technology
						The Lincang Municipal Bureau of Science and Technology
						The Lincang Municipal Bureau of Science and Technology
1.05	4.47	4.3	•	5	10	Lincang Development and Reform Commission
.28	1.34	1.38	•	1.74	2.56	Lincang Agriculture and Rural Affairs Bureau
1.84	25.4	14	•	14	14	Lincang Administration for Market Regulation
16.9	16.8	15	•	15	10	Lincang Development and Reform Commission
ND	ND	ND	•	ND		Lincang Development and Reform Commission
99.2	95.7	96.6	•	84	80	Lincang Municipal Water Affairs Bureau
33.86	84.22	≥ 80		≥ 80	≥ 80	Lincang Industry and Information Technology Bureau
34.23	86.02	85		88	90	Lincang Agriculture and Rural Affairs Bureau
945.74	1,061.94	970	•	1,000	1,200	Lincang Agriculture and Rural Affairs Bureau
						Licang Municipal Statistics Bureau
0.29	77.00	80.00	•	80	80	Lincang Municipal Finance Bureau
33,720	35,021	36,176	•	46,000	62,000	Lincang Human Resources and Social Security Bureau
4,196	15,194	15,615	•	19,400	28,198	Lincang Agriculture and Rural Affairs Bureau
4.85	75.34	75.15	•	76.05	77.55	Lincang Municipal Health Commission
60.90	67.84	66.00	•	75	100	Lincang Agriculture and Rural Affairs Bureau
34.00	84.60	85.00	•	88	90	Lincang Municipal Water Affairs Bureau
3.53	3.49	≤ 5.5	•	≤ 5.5	≤ 5.5	Lincang Human Resources and Social Security Bureau
9.74	_	6.09	•	8.11	10	Lincang Human Resources and Social Security Bureau
						Lincang Municipal Health Commission
						Lincang Municipal Rural Revitalization Administration
7.83	57.83	70.20	•	70.2	70.2	Lincang Municipal Forestry and Grassland Administration
8.1	98.9	ND	•	ND		Lincang Ecology and Environment Bureau
0.00	5.30	ND	•	ND		Lincang Ecology and Environment Bureau
00	100	100	•	100	100	Lincang Ecology and Environment Bureau
						Lincang Housing and Urban-rural Development Bureau
6.25	40.58	42.05	•	65.63	137.85	Lincang Municipal Bureau of Commerce
,395	3,130	2,650	•	3,100	3,600	Lincang Culture and Tourism Bureau
863.61	875.61	946.86		1346	1500	Lincang Development and Reform Commission
ND	ND	20.57	•	27	35	Lincang Human Resources and Social Security Bureau
-			Ţ.		30	Lincang Development and Reform Commission
						Lincang Agriculture and Rural Affairs Bureau
						Emoung Agriculture and Hurai Arians Dureau

[•] indicates that less than 60% of the target value is achieved, • indicates that 60%-80% of the target value is achieved, • indicates that over 80% of the target value is achieved, • indicates that the target is achieved or exceeded, and • indicates that the data is missing or not comparable.

ND indicates that data is not disclosed or not available at this time.

No * mark indicates that these indicators are common indicators for data in 2017-2022,* means the indicator is unique for data in 2017-2020, ** means the indicator is a new addition for data in 2021-2022.

4.2 Performance of Key Task Areas

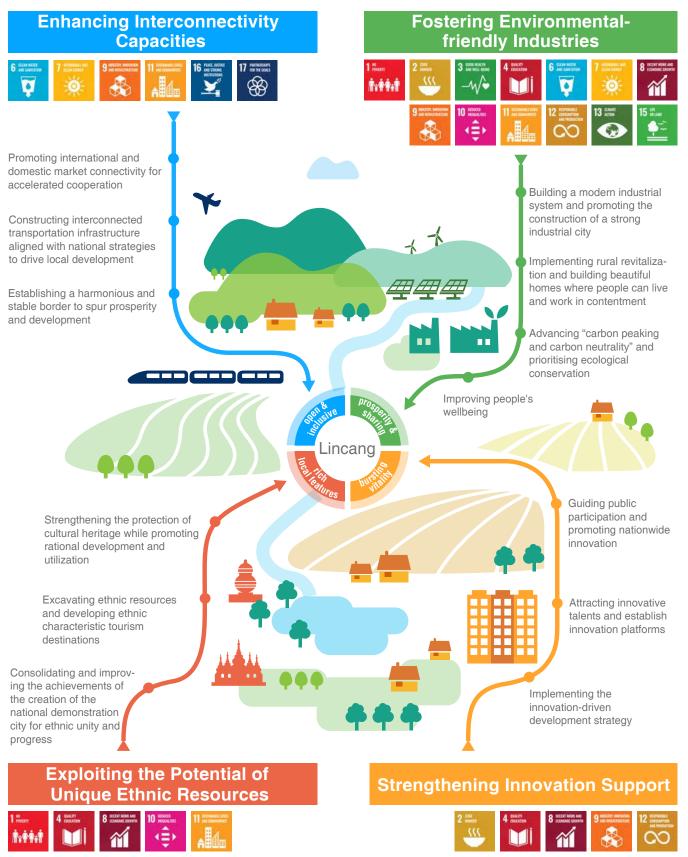


Figure 4.1 Sustainable development vision and key task areas of Lincang City

Lincang City, with a focus on "innovation-driven development in less-developed multi-ethnic borderland areas", is proactively exploring strategies to leverage its abundant featured ethnic and cultural resources, natural ecological resources and geographic advantages for development. Guided by the vision of "openness and inclusiveness for strength, prosperity and sharing for wealth, rich local features for beauty, and bursting vitality for new", Lincang has identified four key task areas: enhancing overall interconnectivity capacities, promoting the growth of environmental-friendly industries, maximising the potential of unique ethnic resources, and bolstering innovation support capabilities effectively.

During implementation, Lincang strategically aligns its resource endowment with development characteristics, tailoring action programmes to its specific needs and development trends. The phased programmes aim to support sustainable development through targeted projects. The Construction Plan (2018-2020) supports the implementation of 99 key construction projects spanning five action areas: speeding up infrastructure construction, promoting green industries, opening up the border economy and cooperation, poverty alleviation and upgrading industries for rural revitalization, and culture inheritance and development. By the end of 2020, the 99 projects achieved a cumulative investment of 87.08 billion Chinese yuan. In continuation, the Construction Plan (2021-2025) supports the implementation of 91 key projects in five action areas: enhancing regional openness and cooperation, implementing the strategy of rural revitalization, protecting and inheriting ethnic cultures, constructing ecological civilization pioneer zones, and innovation-driven high-quality development. As of June 2023, the total investment reached 26.13 billion Chinese yuan .

Sankey diagrams in Figure 4.2 and Figure 4.3 illustrate how the key construction projects in each task align with the concept of SDGs. The thickness of lines reflects the projects' contribution to the SDGs and highlights changes in focus at different stages. Overall, the largest number of projects related to SDG9, constituting 37.37% of the total, followed by SDG8 (14.74%), SDG11 (12.63%) and SDG17 (8.42%). In comparing the two phases, the Construction Plan (2021-2025) no longer specifically schedules projects for SDG1 but introduces projects for SDG10 and SDG13 instead.

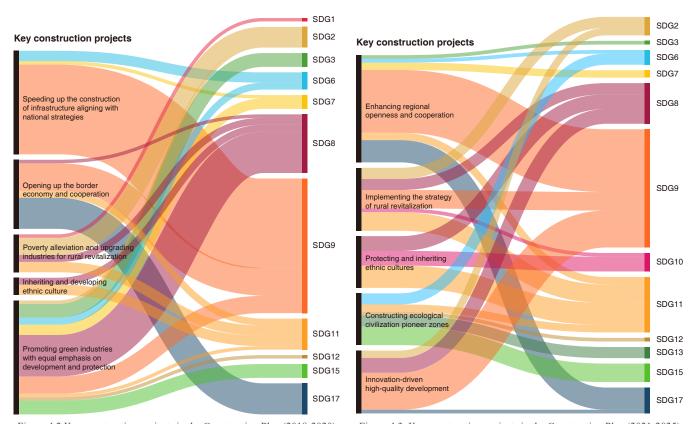


Figure 4.2 Key construction projects in the Construction Plan (2018-2020) align with SDGs

Figure 4.3 Key construction projects in the Construction Plan (2021-2025) align with SDGs

Note: A key construction project may support multiple SDGs, in this case, only the most prominent SDG is selected for display.

Among the five action areas in the Construction Plan (2018-2020), the green industry promotion action contains the largest number of projects, involving green energy, green food, healthy life destination construction and ecological protection, etc., which covers multiple SDGs such as SDG2, SDG3 and SDG9 in addition to SDG8. What follows is the infrastructure construction acceleration action, including comprehensive transportation network, logistics, water conservancy and other infrastructure construction, which is contribute the most to implement SDG9.

Among the five action areas in the Construction Plan (2021-2025), the regional openness and cooperation enhancement action contains the most projects, with project types mainly in the areas of infrastructure upgrading and the construction of border economic cooperation zones, which provide strong support to SDG9 and SDG17.

Comparing the key construction projects in two phases, the number of projects in the areas of rural revitalization and the protection and inheritance of ethnic culture in Lincang has increased, providing important support for the implementation of SDG2, SDG8, SDG9 and SDG11. Meanwhile, Lincang has raised its attention to the areas of climate change and innovation-driven development, and key construction projects in two actions of ecological civilization pioneer zone construction and innovation-driven high-quality development have been explicitly added to the Construction Plan (2021-2025). Among the newly added projects, key construction projects in action area of ecological civilization pioneer zone construction mainly include ecological environmental protection, biodiversity protection, and resources conservation and utilization, which can effectively support the implementation of SDGs such as SDG6, SDG11, SDG12, SDG13, and SDG15. key construction projects in action area of innovation-driven high-quality development focus on gathering innovative talents, building innovation platforms and strengthening technological research, which can provide support for the implementation of SDG2, SDG8 and SDG9 and other SDGs.

The direction of actions in the two phases shows that Lincang City has continued to pay attention to infrastructure construction, economic openness and cooperation, rural revitalization and the protection and inheritance of ethnic cultures and has dynamically adjusted the deployment of key construction projects, taking into account national policies, the international environment and the development and changes in the development of the city its own comprehensively.



Table 4.2 Key tasks areas, detailed descriptions, and key actions and projects for sustainable development of Lincang City

key task areas	Detailed descriptions of key task areas	key actions and projects				
		Actions for accelerating the infrastructure construction aligning with national strategies				
		Comprehensive transportation network construction project				
		Logistics network construction project				
		Water network construction project				
	Promoting international and domestic market connectivity for accelerated cooperation	Energy security network construction project				
		Information network construction project				
Enhancing	2. Constructing interconnected transportation	Actions for opening-up the border economy and cooperation				
Interconnectivity Capacities	infrastructure aligned with national strategies to drive local development	Lincang border economic cooperation zone construction project				
Capacities	unve local development	Customs clearance facilitation construction project				
	Establishing a harmonious and stable border to spur prosperity and development	International exchange and cooperation project				
	spur prosperity and development					
		Actions for enhancing regional openness and cooperation				
		Internal and external infrastructure upgrading project				
		Border economic cooperation platform construction project				
		 China-Myanmar exchanges and cooperation deepening project Actions for promoting green industries with equal emphasis on 				
		development and protection				
		Green energy construction project				
		Green food construction project				
	1. Building a modern industrial system and promoting the construction of a strong industrial city 2. Implementing rural revitalization and building beautiful homes where people can live and work in contentment	Healthy life destination construction project				
		Lancang River basin protection and development project				
		Actions for implementing the rural revitalization strategy				
		Plateau characteristic agricultural base construction project				
Fostering Environmental-		Rural living environment improvement project				
friendly Industries	3. Advancing "carbon peaking and carbon	Farmer's scientific literacy improvement project				
	4. Enhancing people's livelihoods to foster a sense of satisfaction, happiness and safety 4. A sense of satisfaction, happiness and safety	Rural industry development project				
		Rural construction upgrading project				
		Rural governance demonstration project				
	among the public	Actions for constructing ecological civilization pioneer zones				
		Carbon peaking innovation demonstration project				
		Environmental protection project				
		Biodiversity protection project				
	Consolidating and improving the achievements	Actions for inheriting and developing ethnic cultures				
	of the creation of the national demonstration city for ethnic unity and progress, narrating the "Lincang story of ethnic unity"					
		Ethnic culture development project				
Exploiting the Potential of Unique		Actions for protecting, inheriting and innovatively developing				
Ethnic Resources		ethnic cultures				
		Ethnic unity and progress project Excellent others culture protection and inheritance project.				
		Excellent ethnic culture protection and inheritance project "World Vo Township" towing brand promotion project				
	Implementing the innovation-driven development	Trong to remain stand promotion project				
	strategy, stimulating innovation vitality	development				
Strengthening	Highlighting development focus, attracting talents	Innovation entity cultivation project				
Innovation Support		Innovation team introduction and training and national quality				
	Guiding public participation, promoting	 improvement project Innovation platform construction and science and technology 				
	entrepreneurship and innovation	research projects				



Lincang City has an advantageous location, positioned as an international channel connecting the Pacific Ocean and the Indian Ocean in an east-west direction. It serves as the central hub in the cross structure of the Chongging-Xinjiang-Europe Railway, the Yangtze River Economic Belt and the Maritime Silk Road in the north-south direction. To leverage its geographic advantages and address the constraints and development needs associated with transportation network improvements, internal and external cooperation, and enhanced openness, Lincang has formulated a development path. That path involves accelerating the construction of opening-up and cooperation platforms, elevating cooperation levels, establishing an important channel linking Lincang to both international and domestic spheres, and fostering collaborations with neighbouring countries like Myanmar. The overarching goal is to enhance domestic openness and cooperation, fostering a more expansive, inclusive and profound open economy.

To achieve the goals, Lincang has outlined three key tasks: promoting international and domestic market connectivity for accelerated cooperation, constructing interconnected transportation infrastructure aligned with national strategies to drive local development, and establishing a harmonious and stable border to spur prosperity and development.

Detailed descriptions of key task areas

- 1. Promoting international and domestic market connectivity for accelerated cooperation
- 2. Constructing interconnected transportation infrastructure aligned with national strategies to drive local development
- 3. Establishing a harmonious and stable border to spur prosperity and development

Key actions and projects

- 1. Actions for accelerating the infrastructure construction aligning with national strategies
- Comprehensive transportation network construction project
- Logistics network construction project
- Water network construction project
- Energy security network construction project
- Information network construction project
- 2. Actions for opening-up the border economy and cooperation
- Lincang border economic cooperation zone construction project
- Customs clearance facilitation construction project
- International exchange and cooperation project
- 3. Actions for enhancing regional openness and cooperation
- Internal and external infrastructure upgrading project
- Border economic cooperation platform construction project
- China-Myanmar exchanges and cooperation deepening project

Detailed descriptions of key tasks

1. Promoting international and domestic market connectivity for accelerated cooperation

9 17

The task involves actively integrating the *Regional Comprehensive Economic Partnership Agreement* (RCEP) and participating in the construction of China-Myanmar Economic Corridor. The focus is on developing the Lincang Border Economic Cooperation Zone, with a commitment to deepening openness and cooperation with Myanmar. The strategic approach includes comprehensively building a modern infrastructure network and accelerating the development of China-Myanmar Indian Ocean international corridor through a new transportation system encompassing sea, road and railway routes. Additionally, the goal is to accelerate the growth of international trade and the modern logistics industry, positioning Lincang as a crucial component of China's open corridor linking South Asia, Southeast Asia, and the Indian Ocean Rim region.

2. Constructing interconnected transportation infrastructure aligned with national strategies to drive local development



The task involves the promotion of land transport passages construction to South Asia and Southeast Asia, expediting the development of a comprehensive transportation network of railways, highways, civil aviation and waterway transportation. The task also includes accelerating the implementation of the county-level "all-access" and "interconnectivity" projects for highways, connecting the eight counties (districts) and neighbouring cities and towns to comprehensively enhance connectivity levels. Additionally, there is a focus on improving ordinary national and provincial trunk highways and rural roads to increase accessibility and service capacity in rural transportation.

3. Establishing a harmonious and stable border to spur prosperity and development



The task involves promoting civil-military integration, enhancing long-term social security mechanisms, and strengthening border defence capabilities. Efforts also include continuously cracking down on cross-border criminal activities, improving governance systems for drug control and public awareness, to maintain social stability and protecting the people and their livelihoods. There is also an emphasis on accelerating the modernization of governance system and capacities in the border areas, coordinating efforts related to the BRI, improving people's well-being and protecting ecological environment to ensure security, stability, and prosperous development along the border.

As of June 2023, the China-Myanmar New Corridor has facilitated: total weight of imports and exports of **1,578,700** tons, with a total value of **6.78** billion Chinese yuan, witnessed **20** batches of two-way mutual transportation-through a multimodal transport special route that combines sea, road and railway.

A well-established logistics layout pattern has emerged for goods from Mengding Qingshuihe Port: can reach Yangon Port in Myanmar within **72 hours** by road, reach Chengdu within **72 hours** by railway.

In 2022, the Mengding Qingshuihe Port achieved: an import and export trade value of **3.8** billion Chinese yuan, a border trade value of **330** million Chinese yuan.

The urban areas and townships of all eight counties (districts) are **fully covered** by 5G networks.

All administrative villages and natural villages throughout Lincang have **100% coverage** of 4G services and fixed broadband networks.



Project highlights and progress

Comprehensive Transportation Network Construction. Lincang has made significant progress in developing a modern transportation network, addressing long-term traffic constraints and positioning itself as the fourth prefecture (city) in Yunnan Province with airport, high-speed railways, highways and waterway transport. This transformation has elevated Lincang's transportation system from low speed to high speed, from single to multiple modes, creating a comprehensive network that spans urban and rural areas, connecting seamlessly with the other parts of the country.

In December 2017, the completion of the airport highway marked a historic moment, ending Lincang's era of having no highways and entering the "high-speed era". As of June 2023, the city has constructed a total of 468 kilometres of highways, of which 324 kilometres have been open to traffic.

Highways



In December 2020, the
Dali-Lincang Railway was
completed and opened to
traffic, half a year ahead of
schedule. This achievement
not only ended Lincang's
history of having no railway
but also integrated the city
into the province's 4-hour

economic circle.

In September 2023, the completion and opening of Fengqing Zhonghe Airport completed and synergized with Lincang Boshang Airport and Cangyuan Washan Airport. This development has further enhanced Lincang's service functions in air transportation and emergency rescue.



Civil Aviation



Railways

Waterway Transport

Leveraging the Lancang River and large-scale hydro-power stations like Xiaowan, Manwan, Dachaoshan and Nuozhadu, Lincang has huge potential in the reservoir area for shipping. It has 447.6 kilometres of shipping mileage and has constructed 10 wharves to support waterway transport.



Figure 4.4 On December 18, 2017, Lincang's celebrated the official opening of its first highway section (Scan the QR code for an the introduction video on Lincang's transportation development)

The new China-Myanmar corridor through Lincang Qingshuihe Port is in operation. Lincang actively seeks to include the China-Myanmar sea-highway-railway intermodal transportation into the framework of China-Myanmar economic corridor cooperation planning, and has introduced 25 measures to support the main enterprises in the chain to accelerate the corridor construction. In August 2021, the first third-country goods reached Chengdu via Myanmar. Multiple trial transports, including routes like "Chongqing-Lincang-Myanmar", "Sichuan Deyang-Lincang-Myanmar" and "Shenzhen-Lincang-Rangoon-India" occurred. As of June 2023, 18,940 containers completed sea-highway-railway and highway-railway intermodal transport.





Figure 4.5 The launching ceremony of Lincang Station of China-Myanmar New Corridor was held at Lincang Railway Station on August 25, 2021

Leveraging the Lincang Border Economic Cooperation Zone (LBECZ) to strengthen border economic cooperation.

China and Myanmar jointly established the LBECZ in 2022, emphasizing "joint planning, joint construction, joint management, and joint sharing". This initiative aims to create a China-Myanmar industrial development community. LBECZ operates through three national ports, Mengding Qingshuihe, Zhenkang Nansan and Cangyuan Yonghe, focusing on industries like import and export processing, cross-border trade, and logistics to promote featured industries. From January to April 2023, Mengding Qingshuihe Port alone achieved a total import and export value of 1.953 billion Chinese yuan. Additionally, border trade saw 47,905 bills, 90,048 tons of freight, and a total value of 409 million Chinese yuan, directly benefiting border residents by 2.4 million Chinese yuan, and increasing village collective income by 950,000 yuan.





Figure 4.6 Appearance of the joint inspection building at Mengding Qingshuihe Port (left), and the service window of the border trade cooperative (right)



Lincang has a favourable ecological environment and rich natural resources. To address challenges such as limited transformation capacity of featured resources and weak core competitiveness of industries, Lincang has outlined a strategic approach that involves several key elements. First, Lincang places ecological environmental protection at the forefront, with a focus on key areas such as the Lancang River green development economic belt and the Nanting River bio-industry economic belt. This involves intensifying scientific research on ecological protection and establishing a robust green innovation system. Besides, the strategy involves enhancing the quality and efficiency of green industries, fostering environmental-friendly sectors. This includes the development of green energy, green food industries, and the establishment of healthy life destinations. Meanwhile, Lincang is committed to sustaining rural revitalization efforts, contributing to common prosperity for its residents.

To achieve the goals, Lincang has outlined four key tasks, namely building a modern industrial system and promoting the construction of a strong industrial city, implementing rural revitalization and building beautiful homes where people can live and work in contentment, advancing "carbon peaking and carbon neutrality" and prioritising ecological conservation, and enhancing people's livelihoods to foster a sense of satisfaction, happiness and safety among the public.

Detailed descriptions of key task areas

- 1. Building a modern industrial system and promoting the construction of a strong industrial city
- 2. Implementing rural revitalization and building beautiful homes where people can live and work in contentment
- 3. Advancing "carbon peaking and carbon neutrality" and prioritising ecological conservation
- Enhancing people's livelihoods to foster a sense of satisfaction, happiness and safety among the public

Key actions and projects

- Actions for promoting green industries with equal emphasis on development and protection
- Green energy construction project
- Green food construction project
- · Healthy life destination construction project
- Lancang River basin protection and development project
- 2. Actions for implementing the rural revitalization strategy
- Plateau characteristic agricultural base construction project
- Rural living environment improvement project
- Farmer's scientific literacy improvement project
- Rural industry development project
- Rural construction upgrading project
- Rural governance demonstration project
- 3. Actions for constructing ecological civilization pioneer zones
- Carbon peaking innovation demonstration project
- Environmental protection project
- Biodiversity protection project

Detailed descriptions of key tasks

1. Building a modern industrial system and promoting the construction of a strong industrial city

2 7 8 9 12

The task involves the development of new energy industries by leveraging the integration of "wind, solar, hydro and storage", extending the energy industry chain, and facilitating the deep integration of renewable energy with advanced manufacturing. Additionally, it emphasises strengthening the construction of green food industries, with a focus on plateau characteristic products like tea, fruits, sugar, vegetables, cattle, coffee and Chinese medicinal herbs. The goal is to foster development across the entire industry chain, establish a plateau characteristic agricultural products processing system, and expand the marketing system. Furthermore, the task aims to create destinations for healthy living and wellness retreats, promoting the in-depth integration of the health industry with tourism, sports, culture, education, and healthcare.

2. Implementing rural revitalization and building beautiful homes where people can live and work in contentment

1 2 8 11

The task includes initiatives to improve the rural living environment, accelerate the modernization of rural housing and village construction, and expand the achievements of extreme poverty alleviation. Lincang aims to conduct dynamic monitoring to detect any trends of a return to poverty, implementing support measures such as encouraging new forms of business and new industries to provide more job opportunities. Additionally, the task involves promoting the construction of a belt of cities and towns, advancing people-cantered new-type urbanisation, and build all 44 administrative villages (communities) along the borderline into modernized villages with moderate prosperity. Furthermore, the task seeks to strengthen support in science and technology, promote the application of advanced practical science and technology achievements in rural areas, and the model of sustainable agriculture.

3. Advancing "carbon peaking and carbon neutrality" and prioritising ecological conservation



The task involves prioritising environmental protection by comprehensively improving environmental quality and promoting a holistic and systematic approach to conserving and improving mountain, water, forest, farmland, grasslands, and desert ecosystems, to establish a robust ecological security barrier in southwest China. Additionally, the task contributes to achieving carbon peaking and carbon neutrality objectives through initiatives such as promoting green and low-carbon transformation, improving resource utilization efficiency, controlling greenhouse gas emissions in the industrial sector, optimizing the functional layout of the city, and increasing carbon sinks.

4. Enhancing people's livelihoods to foster a sense of satisfaction, happiness and safety among the public

3 4 8 10

The task involves multiple initiatives to enhance social welfare and well-being. It includes the implementation of a plan for full coverage of social security, the adjustment mechanism for social insurance benefits, to steadily increase the level of basic social security. Additionally, efforts are directed towards improving the consolidation level of compulsory education and promoting coordinated development of compulsory education in both urban and rural areas, aiming to ensure universal access to preschool education focused on public and non-profit education. Moreover, the task emphasises improving people's healthcare and well-being through the promotion of "Healthy Lincang Initiative", advocating the concept of health for all. The initiatives involve strengthening the cultivation and introduction of healthcare talents, with a comprehensive focus on improving the overall capacity of medical care and healthcare services.

Lincang has developed a total area of **22** million mu (1.47 million hectares) dedicated to plateau characteristic agricultural products, and certified **633** green and organic products.

Macadamia nut planting area ranks first in China, Tea and sugar cane planting area and output volume rank first in Yunnan Province, Walnut planting area and output volume rank second in Yunnan Province As of June 2023, Lincang's installed renewable energy capacity reached **9.77** gigawatts, of which **98.2%** is hydropower.

All administrative villages along the border have **100%** reliability of power supply from the grid; all natural villages have **100%** access to paved roads and **100%** of 5G network coverage.



Project highlights and progress

Integration of renewable energy with advanced manufacturing. Lincang has actively promoted the development of new materials and the application of new technologies, facilitating the deep integration of renewable energy with green advanced manufacturing industry, emphasizing the development of clean energy generation and utilization in industries. To enhance external power supply, Lincang has implemented initiatives such as integrating wind, solar, hydro and energy storage, and the coordination of load and storage between energy sources and the power grid. Additionally, the city has focused on attracting advanced manufacturing enterprises to bolster local energy consumption. As of June 2023, the total installed capacity of renewable energy in Lincang has reached 9.7704 gigawatts. Notably, hydropower



Figure 4.7 Dayakou Hydropower Station in Zhenkang

constitutes a significant portion, reaching 8.4323 gigawatts, including three large hydropower plants in Manwan, Dachaoshan and Xiaowan. The city also hosts 141 small and medium-sized hydropower plants, along with 1.1706 gigawatts of installed capacity from solar power.

Creating healthy living and wellness retreat destinations. Lincang has strategically utilized its unique resources to develop three core products: the Ancient Tea Horse Road health tour, idyllic countryside tour and Va Township tour. This initiative is designed to foster the growth of the healthcare and elderly care services, creating an industrial chain that integrates the all-for-one tourism, healthcare and characteristic towns to promot health tourism consumption. As part of its commitment to environmental sustainability, Lincang has undertaken "village cleaning and greening actions", resulting in the establishment of eight provincial-level "green towns" and 30 "green villages". Mengyou Village in Fengqing County has notably received recognition as "China's beautiful leisure village". Furthermore, Lincang has developed special tourist commodity production bases, such as Wanyao, Mangtuan and Zhongshan, along with 35 key tourism routes. The "Southwest Yunnan — Hengchun Tea Scenery of Secret Va Mountain Countryside Tour" has been distinguished as the national rural tourism boutique route.









Figure 4.8 Residents take part in rural tourism and enjoy a healthy life

Promoting high-quality agricultural products with plateau characteristics. Following the "one county, one industry" development model and to advance the entire industrial chain, Lincang strategically leverages its characteristic industries such as walnut, tea, animal husbandry, sugar and nuts. The city is dedicated to establishing green, high-quality agricultural production bases, adopting sustainable production technologies, and encouraging the aggregation of agricultural industries while extending the value chain. Demonstration counties like Fengqing (walnut), Shuangjiang (tea), Yongde (macadamia nut), Gengma (sugar) have been established, actively promoting the high-quality development of agricultural products in Lincang.

By the end of 2022, Lincang has successfully built a total area of 22 million mu (1.47 million hectares) of plateau characteristic agricultural industrial bases, certifying 650 products with "Three Products and One Indication"¹, covering an area of 5.02 million mu (0.33 million hectares). Additionally, 160 green food brand industrial bases have received certification and achieved 100% listing. 36 enterprise product brands have been included in the Yunnan Province "Green Yunnan Product" enterprises and brand catalogue, with one regional public brand featured in the regional public brands catalogue.

Tea

In line with the *Regulations on the Protection of Ancient Tea Trees in Lincang*, the city is engaged in identifying and preserving ancient tea trees. This includes promoting the certification of organic tea gardens, improving the tea-making process, developing functional tea products, and establishing a comprehensive quality and safety traceability system.



Walnut

Lincang has formed a walnut and washed fruit alliance to advance the standardization of walnut preliminary processing, pushing forward scientific research on the walnut production chain, supply chain and value chain. An integrated industry chain has been established, covering centralized storage of standardized walnut raw material, deep processing, scientific research, technology support, and equipment support.



Macadamia Nut

Lincang has become a hub for national and international scientific research cooperation, hosting the only national key laboratory for macadamia nut testing in China. Additionally, the National Forestry and Grassland Administration Macadamia Nut Engineering Technology Research Center is located in Lincang. The city has also established a big data platform for macadamia nuts and a traceability system.



Sugarcane

Lincang has developed a comprehensive sugar industry chain, resulting in an industrial pattern comprising 34 products across 6 categories, including sugar, liquor, paper, feed, fertilizer and new materials. The comprehensive utilization rate of sugarcane resources in Lincang ranks among the top in China.



Traditional Chinese herbal medicines

Through collaboration with an academician research team, supporting production enterprises, and partnerships with experts and technology commissioners, Lincang is promoting the development of an integrated ecological economy for understory herbal medicines. This initiative has led to the cultivation of Dian gentian, poria, Caulis spatholobi and other Chinese herbal medicines.



¹ "Three Products and One Indication" refers to green food, organic products, pollution-free agricultural products, and agricultural products with geographical indications.



Lincang, as a border city inhabited by diverse ethnic groups, has rich ethnic characteristics, a varied and inclusive culture, obvious humanistic advantages and distinctive urban charm. To protect, inherit and achieve sustainable development of ethnic culture, addressing challenges such as a singlar approach to culture inheritance, insufficient exploration of cultural resources, Lincang has established a development path. The path, grounded in the inheritance, protection and utilization of ethnic resources and guided by the construction of the border-boosting demonstration zone, aims to further promote ethnic unity and progress, leading to a new era of enhanced cultural richness. By prioritizing innovation and creativity, Lincang seeks to optimize the allocation of various ethnic resources, creating a collection of ethnic traditional culture art masterpieces and folk handicrafts cultural brands. The city aims to innovate the development mode by integrating tourism and other industries, developing high-quality and featured cultural industries, thereby establishing itself as a leading zone for the high-quality utilization of featured ethnic resources.

To achieve the goals, Lincang has outlined three key tasks: first, consolidating and improving the achievements of the creation of the national demonstration city for ethnic unity and progress, narrating the "Lincang story of ethnic unity", second, excavating ethnic resources and developing ethnic characteristic tourism destinations, and the third, strengthening the protection of cultural heritage while promoting rational development and utilization.

Detailed descriptions of key task areas

- Consolidating and improving the achievements of the creation of the national demonstration city for ethnic unity and progress, narrating the "Lincang story of ethnic unity"
- 2. Excavating ethnic resources and developing ethnic characteristic tourism destinations
- 3. Strengthening the protection of cultural heritage while promoting rational development and utilization

Key actions and projects

- 1. Actions for inheriting and developing ethnic cultures
- Ethnic culture inheritance project
- Ethnic culture development project
- 2. Actions for protecting, inheriting and innovatively developing ethnic cultures
- Ethnic unity and progress project
- Excellent ethnic culture protection and inheritance project
- "World Va Township" tourism brand promotion project

Detailed descriptions of key tasks

1. Consolidating and improving the achievements of the creation of the national demonstration city for ethnic unity and progress, narrating the "Lincang story of ethnic unity"

1 4 10

The task focuses on expanding the coverage of national unity and progress, carry out efforts for national unity and progress, improving people's livelihoods, preserving cultural inheritance, enhance ethnic exchanges, and improving governance. Additionally, the city plans to launch publicity campaigns for creating a positive social atmosphere. Emphasizing the importance of respecting cultural differences, promoting ethnic fellowship activities, and fostering harmony, cultural prosperity and common development in the city.

2. Excavating ethnic resources and developing ethnic characteristic tourism destinations

8 11

The task involves leveraging cultural and natural resources to integrate Lincang into the tourism loop of western Yunnan. The city plans to promote the development of all-for-one regional tourism, contributing to the transformation and upgrading of the culture and tourism industry. Additionally, the task includes focusing on the advantages of tea culture, the natural ecological environment, and ethnic culture to strengthen the construction of tourism infrastructure and service facilities. This aims to create three characteristic tourism routes: the General Western Yunnan Ancient Tea Horse Road Culture Tour, General Western Yunnan Ecology and Nature Tour, and General Western Yunnan Border Charm Tour. The emphasis on ethnic minority culture is highlighted, aiming to develop differentiated and featured tourism and cross-border tourism products. This includes a focus on ethnic festivals and border's charm. Moreover, the task underlines a specific tourism theme: "elderly care and health care, escape the heat and cold", intending to promote the construction of leisure tourism demonstration zones along the Lancang River. This is designed to cater to the preferences and needs of tourists seeking relaxation and health-related activities.

3. Strengthening the protection of cultural heritage while promoting rational development and utilization

8 11

The task involves to encouraging the creation of national cultural and artistic excellence across various domains such as literature, music, dance, film and television, and fine arts. Additionally, there is a strong focus on developing traditional ethnic folk crafts, including paper-making, pottery, bamboo weaving, wood carving, stone carving, ethnic embroidery, and ethnic clothing. The initiative aims to cultivate new forms of cultural industry, promoting the development of new cultural services such as cultural creativity and design, digital content services, light industrial design, and the design of ethnic clothing. The city also plans to enhance the added value of culture industry through the creation and improvement of ethnic cultural festival and exhibition brands.

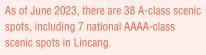
In 2022, "China's Traditional Tea-Making Techniques and Related Practices", including the Yunnan black tea making technique, was inscribed on the Representative List of the Intangible Cultural Heritage of Humanity of the United Nations Educational, Scientific and Cultural Organisation.

9 national representatives of intangible cultural heritage























tourists received in rural tourism achieved 15.8538 million person-times, bring a total rural tourism income of 12.739 billion Chinese yuan.



Project highlights and progress

The protection and inheritance of ethnic cultures. Lincang has carried out initiatives to promote the prosperity of ethnic cultures, such as the projects of the protection and inheritance of outstanding traditional cultures of ethnic minorities, and the construction of cultural excellence. The efforts include documenting, studying and promoting the cultures of 11 hereditary ethnic minorities, nine cross-border ethnic minorities and the unique culture of Limi people in Lincang. As for the protection of intangible cultural heritage and training of representative inheritors, Lincang has trained 47 outstanding inheritors of ethnic and folk culture. The effort relies on over 1,000 national, provincial, municipal and county-level intangible cultural heritage projects and involves 786 representative inheritors. In the development of folk culture and the construction of characteristic ethnic villages, Zhenkang County has fully explored the folk culture resources of "Ashuse" songs and dances, earning the title of the Hometown of Chinese Folk Culture and Art. Nanmei Township in Linxiang District was selected as "the frst batch of ethnic minority characteristic towns in Yunnan Province". Additionally, 49 villages, including Daba Village, have been recognised as "Ethnic Minority Characteristic Villages in Yunnan", and 20 villages, including Mangtuan Village in Mengding Town, have received recognition as "Ethnic Minority Characteristic Villages in China".







Figure 4.9 Intangible cultural heritage programmes and representative inheritors:

Ai Ye, the inheritor of the Dai handmade paper-making technique; Ye Zhengwen, the inheritor of the Dai elephant-foot drum making technique;

Deng Ankang, the inheritor of the pottery-making technique in Wanyao Village (from left to right)





Figure 4.10 Characteristic traditional villages such as Mangtuan Village of Mengding Town of Gengma County (left), and Wanyao Village of Boshang Town of Linxiang District (right)

Unique ethnic resources boost the cultural tourism industry development. Lincang is proactively enhancing its cultural and tourism foundation while developing scenic areas. The city continues to create boutique tourism routes and establishing tourist destinations that highlight cultural creativity, sports, leisure and wellness retreats. The city has developed tourism products that integrates tea culture and tourism, agriculture and tourism, and has initiated new businnesses such as the Yunding Zhuchao Hotel in Shuangjiang Rongkangda Oolong Tea Manor and the Fengqing 3200 Black Tea Culture Court. To support rural tourism, Lincang has diversified the products in different areas, such as bamboo weaving in Zhongshan Village, clay pottery in Wanyao Village, tea in Anshi Village, and dragon fruit in Mang'er Village. The city has also dedicated efforts to cultivate rural tourism souvenirs, folk crafts, and cultural and creative products. As a result, rural tourism has emerged as an important economic driver within Lincang's agricultural and tourism industry. Moreover, by exploring the cultural connotation

of folk festivals and emphasizing elements such as "food, accommodation, travel, entertainment and shopping", Lincang has expanded and diversified its tourism products. The city has successfully organised various festivals, including the Water Sprinkling Festival, "Moh Nin Hei" Carnival, the Green Seedling Festival, the "Ashuse" Singing Festival and the Torch Festival, enhancing the overall tourism experience for visitors.



Figure 4.11 The water-sprinkling dance song "UP Gengma" created by the Gengma Autonomous County Ethnic Song and Dance Troupe (scan the QR code to watch the video.)

Promoting the construction of ethnic unity and progress demonstration zone. Lincang City recognises the deep historical foundation of ethnic unity and progress among various ethnic groups. Given the unique context of being a frontier with diverse ethnic communities in mountainous areas, Lincang has implemented proactive measures. The formation of "fire-pit publicity squads" in languages such as Va, Dai, Miao, Lahu, Blang and Yi Limi involves primary-level staff and local talents. Their purpose is to disseminate and explain the latest national policies and development updates in an easily understandable manner to residents in ethnic villages. In November 2022, Lincang initiated the "Exchange Program for Youth of Various Ethnic Groups" and the "Promotion Program for the Interaction, Exchanges



Figure 4.12 The "fire-pit publicity squad" explains national policies in villages

and Integration of Various Ethnic Groups through Tourism". These initiatives aim to create a conducive social environment that encourages extensive interaction, exchanges and integration among the diverse ethnic groups in the region.



Lincang City, despite being rich in resources, faces challenges due to a relatively weak development foundation with insufficient industrial support and innovation capacity. To address this, the city has adopted a development path focusing on strengthening the core leading capacity of scientific and technological innovation. That involves increasing investment in scientific research, accelerating the transformation of scientific and technological achievements, and fostering a social atmosphere that values science, technology, innovation and talents. Additionally, Lincang aims to integrate science and technology with financial innovation to provide robust support for its high-quality development.

To achieve the goals, Lincang has outlined three key tasks: first, implementing the innovation-driven development strategy, stimulating innovation vitality, second, highlighting development focus, attracting talents and building platforms, and the third, guiding public participation, promoting entrepreneurship and innovation.

Detailed descriptions of key task areas

- 1. Implementing the innovation-driven development strategy, stimulating innovation vitality
- 2. Highlighting development focus, attracting talents and building platforms
- 3. Guiding public participation, promoting entrepreneurship and innovation

Key actions and projects

Action for innovation driving and leading highquality development

- Innovation entity cultivation project
- Innovation team introduction and training and national quality improvement project
- Innovation platform construction and science and technology research projects

Detailed descriptions of key tasks

1. Implementing the innovation-driven development strategy, stimulating innovation vitality

2 4 9

The task involves constructing scientific and technological innovation platforms, creating an environment conducive to innovative entities, attracting talents, and facilitating knowledge and technology transfer to support high-quality development. Recognizing the importance of grassroots engagement, the city encourages science and technology teams and correspondents working directly at the local level. Additionally, Lincang focuses on enhancing the farmers' knowledge through targeted training programmes, emphasizing practical applications of technology in agricultural and rural settings. Furthermore, the city is dedicated to elevating the scientific literacy of the general public by organising regular activities such as Science and Technology Week.

2. Highlighting development focus, attracting talents and building platforms

8 9 12

The objective is to leverage science and technology projects that support talent development as a guide force. This involves improving the mechanism for cultivating innovative talents by closely aligning science and technology projects with industrial development. The task also includes strengthening collaboration with colleges, universities, scientific research institutes, and businesses to advance the construction of high-level scientific and technological innovation platforms. The focus is on consolidating innovation resources within enterprises and industrial parks, facilitating the establishment of scientific and technological public service platforms, and fostering the integration and sharing of resources in the city.

3. Guiding public participation, promoting entrepreneurship and innovation

The task involves initiatives to increase science and technology awareness, aiming to improve the overall scientific literacy. It also includes support for innovation and entrepreneurship practices, fostering a diverse range of entities, to create a conducive policy and institutional environment for entrepreneurship and innovation. Additionally, the task focuses on refining the science and technology evaluation system, managing scientific research projects effectively, and improving the supporting services for knowledge and technology transfer, such as intellectual property rights, policies and regulations, technology evaluation, pilot incubation and more. The overarching objective is to continually promote the transformation and application of scientific and technological achievements, thereby empowering industries development through scientific and technological innovation.

As of June 2023, Lincang has **47 high-tech enterprises**,

199 national science and technology-based small and medium-sized enterprises (SMEs), and registered 466 Yunnan science and technology-based SMEs.



Lincang has built **77 science and technology innovation platforms** at national and Yunnan provincial level, including 36 scientific research platforms, 6 industrial technology platforms, 21 entrepreneur incubation platforms and 14 public science and technology service platforms. **9 scientific and technological achievement transformation centres** have been built, and 27 academicians (experts) workstations in Yunnan Province have been established.

In 2022, Lincang carried out 2,676 **trainings for farmers**, with a total trainees of 133,800 person-times and 2,659 high-quality farmers.





Project highlights and progress

Promoting the green upgrading of industries through scientific and technological research. Lincang has strategically focused on technology needs for the development of local advantageous and characteristic industries, such as sugar, tea, walnut, traditional Chinese medicinal materials, beef cattle, fruits and vegetables, green new materials and more. The city has organised and implemented various green industry development science and technology innovation projects. These initiatives include research and application projects such as the "Key technological innovation research and application for cane sugar full industry chain's", "Key technology research and equipment research and development of tea industry's quality and efficiency improvement", "Key technology research and application demonstration for walnut full industry chain", "Key technology and integrated application research for the development of traditional Chinese medicinal materials industry in Lincang". Through the projects, Lincang has achieved breakthroughs in key technologies, extended the industrial chain and increased overall added value.



Figure 4.13 Yield measurement and acceptance of high-yield and high-quality oilseed rape under the project of integrated research and demonstration of key technologies for high-quality development of oilseed rape industry in Linxiang District



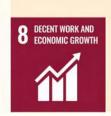
Figure 4.14 Inside view of tea tree seedling breeding base under the project of key technology research and equipment research and development of tea industry's quality and efficiency improvement

Enhancing the scientific and technological literacy of citizens. Lincang City promotes the popularization of scientific and technological resources through information-based science outreach, the development of science and technology infrastructure, and the enhancement of grassroots science and technology capabilities. The city also emphasizes the exchange and cooperation of scientific literacy to improve the balanced, inclusive and high-quality development of science and technology services. As an example, Lincang's modern farmer training project employs a blended approach, combining classroom teaching with field guidance. This initiative focuses on cultivating rural talents in six areas, including agricultural production and management, the construction of "Green and Beautiful Lincang", rural governance, practical agricultural technology, rural craftsmanship, and understanding agriculture-related policies and regulations.





Figure 4.15 Activities of the Science and Technology Week in Lincang



















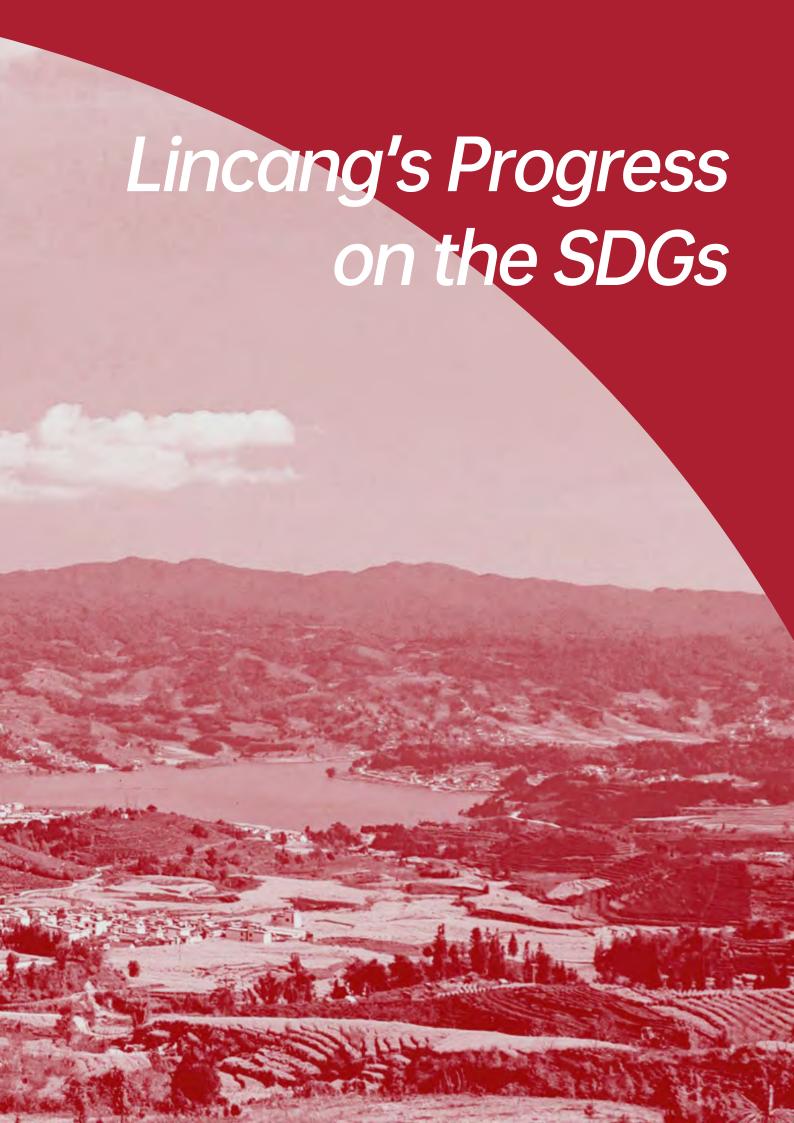












5.1 Overview of the Progress

This report conducts standardized processing and scientific assessment of 85 indicators across 16 Sustainable Development Goals (SDGs) relevant to Lincang (see Chapter 2.4 for detailed methodology). In 2022, Lincang has achieved or is nearing the target value for 58 indicators. 12 targets, including SDG1 (No Poverty),SDG2 (Zero Hunger) and SDG3 (Good Health and Well-being), are well accomplished or close to the target, demonstrating Lincang's significant achievements in poverty alleviation, energy, water resource management, and ecological and environmental protection. SDG16 (Peace, Justice and Strong Institutions) received the highest score, reflecting Lincang's excellence in social justice, judiciary, and governance. Despite the relative low scores for SDG12 (Responsible Consumption and Production) and SDG15 (Life on Land), the status in 2022 is relatively better due to Lincang's robust foundation.

From 2017 to 2022, Lincang demonstrated slight or steady growth in 8 SDGs, including SDG2 (Zero hunger), SDG3 (Good Health and Well-being), and SDG6 (Clean Water and Sanitation), with an overall percentage of 50%. Although SDG8 (Decent Work and Economic Growth), SDG9 (Industry, Innovation and Infrastructure), and SDG10 (Reduced Inequalities) exhibited steady score increase since 2017, there remains a noticeable gap against their target values in 2022 due to inherent weakness. Influenced by the external environment, SDG17 (Partnerships for the Goals) displays a double early warning for status and progress, warranting special attention.

The results indicate that amidst current global economic changes, Lincang needs to further promote economic restructuring, reduce socio-economic gaps, and strengthen partnership building to achieve more comprehensive, balanced and sustainable development.



Figure 5.1 Lincang's performance by SDG

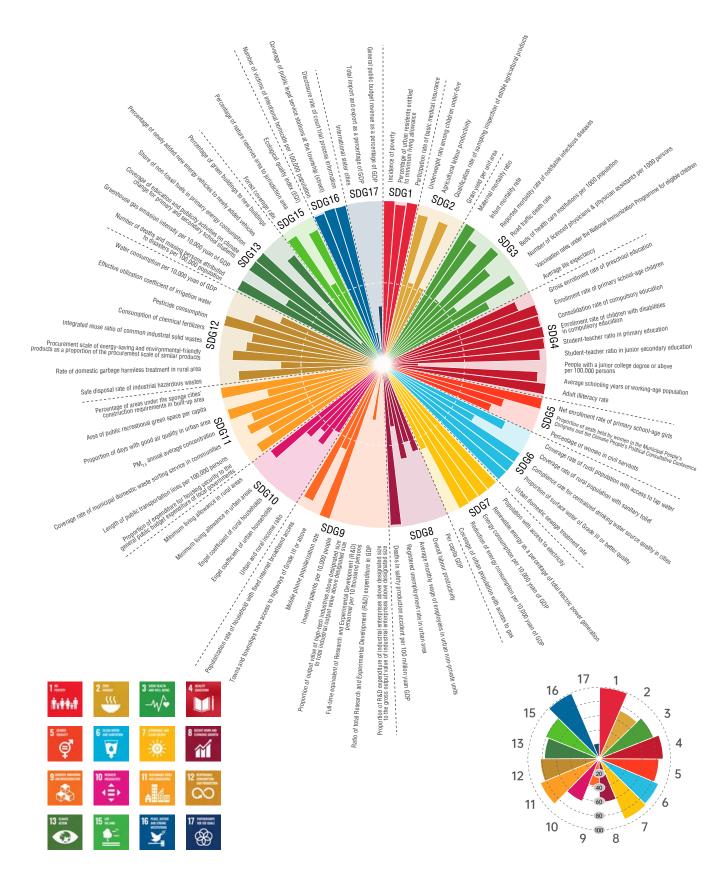


Figure 5.2 Lincang's scores of SDGs indicators in 2022

Table 5.1 SDG index and dashboard of Lincang City from 2017 to 2022

Sustainable Development Assessment Indicators	Unit	2017	2018	2019	2020	2021	2022
SDG1: No Poverty							
Incidence of poverty	%						
 Percentage of urban residents entitled to minimum living allowance 	%	•	•			•	•
Participation rate of basic medical insurance	%						
SDG2: Zero Hunger							
Underweight rate among children under-five	%						
Agricultural labour productivity	10,000 yuan/ person	•	•	•	•	•	•
 Qualification rate of sampling inspection of edible agricultural products 	%	•	•			•	
Grain yield per unit area	kg/hectare	•				•	
SDG3: Good Health and Well-Being							
Maternal mortality ratio	per100,000	•	•	•	•	•	•
Infant mortality rate	persons ‰						
Reported morbidity rate of notifiable infectious diseases	per100,000						
	persons per100,000						
Road traffic death rate	persons					•	
Beds of health care institutions per 1000 population	1,000 person	•	•			•	•
 Number of licenced physicians & physician assistants per 1000 persons 	per 1,000 person					•	
 Vaccination rates under the National Immunization Programme for eligible children 	%	•				•	•
Average life expectancy	year						
SDG4: Quality Education							
Gross enrollment rate of preschool education	%						
Enrollment rate of primary school-age children	%						
Consolidation rate of compulsory education	%						
 Enrollment rate of children with disabilities in compulsory education 	%		•			•	•
Student-teacher ratio in primary education							
Student-teacher ratio in junior secondary education							
 People with a junior college degree or above per 100,000 persons 	per 100,000 persons						
Average schooling years of working-age population	year						
Adult illiteracy rate	%						
SDG5: Gender Equality							
Net enrollment rate of primary school-age girls	%						
Proportion of seats held by women in the Municipal People's Congress and the Chinese People's Political Consultative Confession	%	•	•	•	•	•	•
Conference Percentage of women in civil servants	%						
SDG6:Clean Water and Sanitation	,0						
Coverage rate of rural population with access to tap water	%						
Coverage rate of rural population with sanitary toilet	%						
Compliance rate for centralized drinking water source quality in	%						
Proportion of surface water of Grade III or better quality	%						
Urban domestic sewage treatment rate	%						
SDG7: Affordable and Clean Energy							
Population with access to electricity	%						
Renewable energy as a percentage of total electric power	%					•	•
energy consumption per 10,000 yuan of GDP	ton/10,000 yuan						
Reduction of energy consumption per 10,000 yuan of GDP	%	•				•	
Coverage of urban population with access to gas	%					•	
SDG8: Decent Work and Economic Growth							
Per capita GDP	yuan/person					•	
	VIIIOD						
Overall labour productivity	yuan	_	_	_			
						•	
Overall labour productivity		•		•	•	•	•

Note: Complete or close to achieving the target value A certain gap Significant gap Facing serious challenges Data not disclosed or no statistics. In order to ensure the validity of the assessment data, the missing data for the current year are substituted by screening the data of most recent years that is time-effective and accessible.

Continued

Continued							
Sustainable Development Assessment Indicators	Unit	2017	2018	2019	2020	2021	2022
SDG9: Industry, Innovation and Infrastructure							
Proportion of R&D expenditure of industrial enterprises above designated size to the gross output value of industrial	%	•	•	•	•	•	•
enterprises above designated size Ratio of total Research and Experimental Development (R&D) expenditure in GDP	%	•	•	•	•	•	•
Full-time equivalent of Research and Experimental Development (R&D) personnel per 10 thousand persons	10,000 persons·year	•	•	•	•	•	
Proportion of output value of high-tech industries above designated size to total industrial output value above designated		•	•	•	•	•	•
 Invention patents per 10,000 people 		•	•	•	•	•	•
Mobile phone popularization rate	%	•	•	•	•	•	•
Towns and townships have access to highways of Grade III or above	%		•	•	•	•	•
Popularization rate of household with fixed internet broadband access	%	•	•	•	•	•	•
SDG10: Reduced Inequalities							
Urban and rural income ratio	%	•				•	
Engel coefficient of urban households	%						
Engel coefficient of rural households	%						
Minimum living allowance in urban areas	yuan/month						
Minimum living allowance in rural areas	yuan/month						
SDG11: Sustainable Cities and Communities	yuan/month						
Proportion of expenditure for housing security to the general	%						
public budget expenditure of local governments		•			•	•	•
Length of public transportation lines per 100,000 persons	km/100,000 persons						
Coverage rate of municipal domestic waste sorting service in communities	%						
PM _{2.5} annual average concentration	microgram /						
Proportion of days with good air quality in urban area	cubic metre %						
	% square metre/						
Area of public recreational green space per capita	person	•	•		•		•
 Percentage of areas under the sponge cities' construction requirements in built-up area 	%	•	•	•	•	•	•
SDG12: Responsible Consumption and Production							
Safe disposal rate of industrial hazardous wastes	%	•		•	•	•	•
Rate of domestic garbage harmless treatment in rural area	%					•	•
 Procurement scale of energy-saving and environmental-friendly products as a proportion of the procurement scale of similar products 	%	•	•	•	•	•	•
Integrated reuse ratio of common industrial solid wastes	%						
Consumption of chemical fertilizers	ton/hectare	•	•	•	•	•	•
Pesticide consumption	kg/hectare						
Effective utilization coefficient of irrigation water		•				•	•
Water consumption per 10,000 yuan of GDP	cubic metre/10,000 yuan	•	•	•	•	•	•
SDG13: Climate Action	yuan						
Number of deaths and missing persons attributed to disasters per 100,000 population	per 100,000 person	•	•	•	•	•	•
Greenhouse gas emission intensity per 10,000 yuan of GDP	kg/10,000 yuan	•	•	•	•	•	•
Coverage of education and publicity activities on climate change for primary and according school students.	%		•		•	•	•
for primary and secondary school students • Share of non-fossil fuels in primary energy consumption	%						
Percentage of newly added new energy vehicles to newly added vehicles							
Percentage of green buildings to new buildings	%						
SDG15: Life on Land							
Forest coverage rate	%	•	•		•	•	•
Percentage of nature reserves area to jurisdiction area	%						
Ecological quality index (EQI)							
SDG16: Peace, Justice and Strong Institutions							
Number of victims of intentional homicide per 100,000 population	per 100,000	•				•	
Coverage of public legal service stations at the township (street)	person						
Disclosure rate of court trial process information	%						
SDG17: Partnerships for the Goals	,,,						
International sister cities							
Total import and export as a percentage of GDP	%						
General public budget revenue as a percentage of GDP	%						
- Control public budget revenue as a percentage of GDF	,·						

SDG1 No Poverty

International community

The global focus is on eradicating extreme poverty as the primary goal of the SDGs by 2030. This involves providing social security, creating employment opportunities, and improving education and sanitation worldwide.

China

By the end of 2020, China had already ensured that rural poor had full access to food, clothing, compulsory education, basic medical services and safe housing. Remarkably, China achieved the 2030 Agenda's poverty eradication goal a decade ahead of schedule, contributing significantly to global poverty reduction and overall human development.

Lincang

Lincang, comprising eight counties that were once poverty-stricken, successfully reached the goal of zero poverty in people and villages by the end of 2019, a year ahead of schedule. The next steps for Lincang involve elevating the income of those lifted out of poverty, unlocking their potential for improvement and development, sustaining and expanding the results of poverty alleviation, and realizing comprehensive rural revitalization.



End poverty in all its forms everywhere



The government has increased financial input

Since 2016,
the municipal public finance has arranged
100 million yuan of
special poverty alleviation funds
each year on poverty alleviation
(2020)

Poverty alleviation security system combining social security with poverty alleviation development and social assistance









84,700 people

were provided with subsistence allowances

Education, medical care and housing are secured



All Lincang citizens have been fully covered by basicmedical insurance, critical illness insurance, medical assistance and contracted family doctor services



Compulsory education has reached all eligible children of compulsory school age from poor families



All dilapidated houses have been renovated and housing safety risks have been comprehensively eliminated

Eradicating extreme poverty

By the end of 2019,

all 368,942 people of 94,357 households **poor population** in Lincang City had been **lifted out of poverty** per China's current standards, and all 562 **poor villages had been fully removed** from the poverty list.



From poverty alleviation to rural revitalization

In May 2021, the Poverty Alleviation and Development Office of the Lincang Municipal People's Government was reorganised into the Lincang Municipal Rural Revitalization Administration, with the aim of consolidating and expanding the results of fight against poverty and realizing rural revitalization through a long-term approach.







Culture



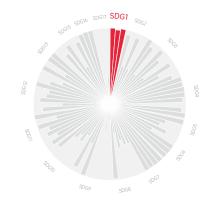


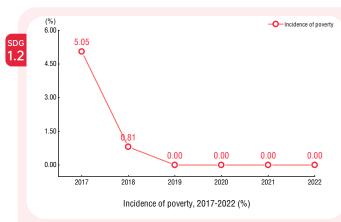
Ecology

Organisation

^{*}Data on this page are statistics of 2022 unless otherwise noted.

Lincang has made significant progress in implementing SDG1, with evaluation results improving from 95.61 points in 2017 to 99.37 points in 2022. In 2019, Lincang fully eliminated absolute poverty. It has achieved full coverage of basic medical insurance in the whole city as of 2022, and the score for the participation rate of basic medical insurance in 2022 was 100 points.

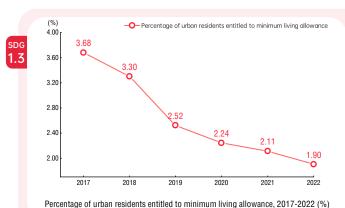




Data source: Lincang Municipal Rural Revitalization Administration

Lincang City has become one of the first cities in Yunnan Province to realise poverty eradication for the whole city through the implementation of such strategies as business development, poverty alleviation through relocation, education poverty alleviation, poverty alleviation through health promotion, eco-economy development, subsistence allowances, societal assistance poverty alleviation, and improvement of the regional development capacity of the impoverished areas, etc. The problem of absolute poverty that has been plaguing Lincang for thousands of years has been solved eventually.

Data show that Lincang's poverty incidence was reduced to 0.81% in 2018 from 5.05% in 2017, and in December 2019, all 94,357 households with 368,942 people on file were lifted out of poverty, and all 562 poor villages were removed from poverty list, so Lincang achieved the goal of no poverty for poor population and villages one year ahead of schedule.

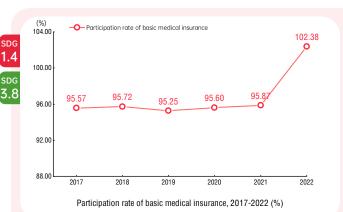


. Croomage or area. Toolaante criticia to minimum ming anomanos, 20

Data source: Lincang Municipal Civil Affairs Bureau

Lincang City, through scientific calculations, formulates and raises its standards for minimum living allowances and support for people in extreme poverty year by year, and promotes the sustained and healthy development of urban minimum living allowance work, covers the poor and vulnerable groups to a greater extent, practically safeguarding the basic rights and interests of the urban residents in difficulty.

Data show that the percentage of urban residents entitled to minimum living allowance decreased year by year, from 3.68% in 2017 to 1.90% in 2020. Correspondingly, the average standard of Lincang's urban minimum living allowance increased year by year, from 450 Chinese yuan/(person·month) in 2017 to 732 Chinese yuan/(person·month) in 2020.



Data source: Lincang Municipal Healthcare Security Bureau

Lincang has continuously improved its basic medical insurance policy, increased the per capita fiscal subsidy of basic medical insurance for urban and rural residents year by year, and continued to promote the full coverage of medical insurance.

Data show that from 2017 to 2021, the participation rate of basic medical insurance in Lincang City is on an overall upward trend, basically stabilizing at around 95%, and reached 102.38% in 2022.

Dynamic Monitoring and Precise Assistance to Prevent Poverty-stricken Populations from Relapsing

To consolidate the achievements made in poverty alleviation and proactively prevent relapses, Lincang has implemented targeted initiatives in areas such as compulsory education, basic medical care, safe housing, drinking water supplies, employment assistance, and livelihood support for low-income rural populations. Leveraging modern information technology, Yunnan Province introduced the user-friendly "Find the Government" app, enabling easy access to assistance for rural residents via their smartphones. Using a grid-based management system, Lincang's counties (districts) employ a proactive approach to monitor changes in rural households, promptly guiding those facing difficulties to seek assistance either in writing or through the app. The city government swiftly verifies information, facilitating the timely



Figure 5.3 Dynamic monitoring and precise assistance to prevent poverty-stricken individuals from relapsing in Anye Village, Shanjia Township,

Cangyuan Autonoous County

delivery of aid to low-income populations. Regularly data analysis and information sharing with relevant authorities such as the Municipal Rural Revitalization Administration and counties (districts) authorities enable effective implementation of social security and assistance measures, achieving a 0% poverty incidence in 2022. This approach addresses coordination challenges, enhances information sharing, and strengthens the implementation of poverty-alleviation measures.

■ Relocating the Impoverished from Inhospitable Areas to Places with Better Economic Prospects

The resettlement initiative in Hepai Township, Gengma Autonomous County, Lincang City, aimed to uplift impoverished households from remote and inhospitable mountainous areas to locations with better economic prospects. Focusing on sustainable development and stable poverty alleviation, the planning and construction of Ze'an New Village, initiated in September 2017, adhered to principles of "urban and rural integration, layout optimization, intensive land use, and moderate scale". By January 2018, after policy interpretation and customized house building plans, 305 people from 82 households across 5 administrative villages and 8 ethnic groups were successfully relocated to Ze'an New Village. The move led to infrastructure improvements, better living conditions, and



Figure 5.4 Aerial view of Ze'an New Village, Hepai Township, Gengma Autonomous County

increased income opportunities through various measures such as training, local employment, agricultural processing, rural tourism, and e-commerce initiatives. Notably, the per capita net income of Ze'an New Village residents rose significantly from 2,634 Chinese yuan in 2017 to 16,385 Chinese yuan in 2022.

■ Leveraging E-commerce for Poverty Alleviation and Income Diversification

Linxiang District strategically tackles challenges in impoverished areas, addressing scattered operations and sluggish agricultural industry transformation through the development of e-commerce platforms. Leveraging the national "e-commerce into the villages" demonstration project, Linxiang established the E-commerce Public Service Centre and E-commerce Entrepreneurship Street in September 2017.

These initiatives serve as multifunctional hubs, integrating data processing, talent training, product display, enterprise agglomeration, incubation of entrepreneurs, government services, livestreaming studios. The district also developed an e-commerce public service system, linking major platforms to grassroots service sites, poverty alleviation workshops, cooperatives, and farmers, thereby expanding



Figure 5.5 Yang Tao, working at Linxiang District E-commerce Service Centre, is promoting different categories of Lincang alpine tea in the livestreaming studio

the sales channels for agricultural products. With a 15 million Chinese yuan investment, Linxiang established an e-commerce workshop for poverty alleviation, engaging over 75 local small and medium enterprises (SMEs) such as Linxiang District E-commerce Public Service Centre, Linxiang District E-commerce Association, and farmers in eight townships under its jurisdiction. The effort also included the development of five production lines with food production licence qualifications such as walnut processing, honey filling and sales, wild fungus processing, substitute tea processing, and Lincang ham processing.

These initiatives, coupled with accurate data entry, full traceability monitoring, and all-channel unified distribution management, resulted in the standardisation, scale and branding of agricultural products. By 2022, Linxiang District achieved a cumulative sales volume of 610 million Chinese yuan through the e-commerce platform, benefiting over 8,800 individuals and realizing an average household income increase of 1,600 Chinese yuan.



Figure 5.6 Product display at the e-commerce public service centre of Linxiang District Bureau of Commerce

■ Empowering Rural Women: Skills Training and Financial Services for Economic Participation

Recognizing the indispensable role of women in rural production and governance, Lincang prioritizes enhancing the skills and economic participation of rural women. Through active organisation and mobilization, the city engages women in industrial revitalization, habitat improvement and progress in rural etiquette. Focusing on rural tourism development, Lincang has implemented a skills improvement programme for rural women. Expertled training courses cover service etiquette, food hygiene and safety, family education, financial management, and e-commerce, enhancing women's technical skills in different sectors. Special emphasis is placed on projects such as selfdriving tours, wild fishing, pier sightseeing, and farmhouse lodging. Local residents are guided to develop industries involving catering, boating, and the sales of local agricultural products and handcrafts. Lincang actively supports women's



Figure 5.7 Training of De'ang intangible cultural heritage clothing making skills was carried out in Baiyan village of Zhenkang County

entrepreneurship by establishing demonstration sites and workshops for women's poverty alleviation.

These initiatives have led to the creation of 47 municipal and county-level women's demonstration sites for rural revitalization (including 7 municipal level and 40 county/district level), supported by guaranteed loans totalling 442 million Chinese yuan. This support has empowered 3,006 households, enabling 9,228 individuals to initiate businesses and gain employment between 2018 and 2022.

Empowering Farmers through Ecological Tea Plantations for Sustainable Income Growth in Cangyuan Autonomous County

Cangyuan Autonomous County, situated on the China-Myanmar border, has transitioned directly from the end of primitive society to the early stage of socialist society. Cangyuan has a rich history of tea planting and abundant resources of ancient tea trees. Its tea industry covers 81 villages in 11 townships (towns and farms), impacting the production and lives of 60% of farmers.

Despite its long tradition, the local tea industry faced challenges due to insufficient scientific management, outdated land use practices, and low economic profits. In order to leverage local resource advantages, Cangyuan attracted investment to establish a refined tea manufacturing company. The county guided local farmers to form cooperatives, encouraging their participation in the construction and operation of ecological tea plantations through land shares.



Figure 5.8 Tea picking at the organic tea plantation at Mangpang Village, Mengdong Town, Cangyuan Autonomous County

Building on trilateral cooperation, Cangyuan promoted an ecological planting technology system and a sustainable management approach by improving the fertilizer application methods and planting technology, developing and refining the standard system for local organic tea planting.

Community-based skills training was provided, and enterprises were encouraged to pursue certifications for organic tea, green food, rainforest certification, fair trade, and more. This transformation disrupted the traditional mode of tea planting and picking, fostering diversified ecological leisure tourism products. The initiative not only effectively utilized land resources but also generated income while protecting the local biodiversity and the ecological environment, contributing to the inheritance and development of tea culture in the region.

As of 2022, Cangyuan Autonomous County has 45 refined tea industry enterprises, creating 12 types of jobs and 1,094 employment positions. In 2020, tea production reached 756.44 tons, generating an income of 5,638,200 Chinese yuan for tea farmers and increasing per capita income by 13,700 Chinese yuan.

SDG2 Zero Hunger

International community

The United Nations has called on countries to achieve the goal of Zero Hunger by 2030 by increasing the efficiency of agricultural production, improving the food supply chain, reducing waste and losses, and raising food safety and hygiene standards to provide the global population with sufficient nutrition and healthy food.

China

China has actively pushed forward agricultural modernization, continuously strengthened scientific and technological innovation in agriculture, promoted the enhancement of agricultural quality and efficiency, reinforced the protection and utilization of agricultural species resources, and accelerated the green development of agriculture. Through these efforts, China has achieved a steady increase in the production capacity of food and a sustained improvement in people's nutrition. At the same time, China actively participates in international cooperation in the field of food and agriculture, and promotes food security and sustainable agricultural development in developing countries.

Lincang

Lincang City has improved grain output and quality through agricultural science and technology, promoted the quality and safety of agricultural products, regulated the proper use of pesticides and chemical fertilizers, enhanced the

End hunger, achieve food security and improved nutrition and promote sustainable agriculture



Improved agricultural production capacity

(108,000 hectare)

1.62 million mu

high-standard farmland

4,769

family farms

3,866 specialized farmers' cooperatives

52.91%
Ploughing,
planting and harvesting

mechanization rate











Recycling rate of agricultural films 82%

Comprehensive utilization rate of livestock and poultry waste

20/

89%











Sugar

Tea

ıt

etables Livestoc

Establishment of agricultural industrial bases with plateau characteristics of

22 million mu

(1,466,666.67 hectare)

Overall stability of food security

(2017—2022)

The sown area of grain stabilized at over 286,000 hectares



Grain production stabilized at over 1 million tons



Per capita food availability output is over 420 kilogrammes





Improved nutrition of the people

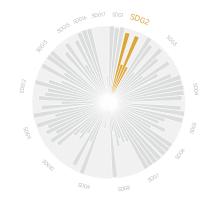
Nutritional interventions targeting key populations, with free nutritional packages for children

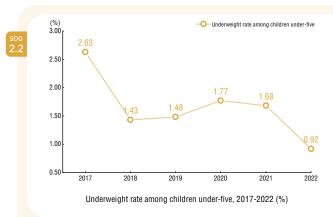
from 6 months to 2 years of age



^{*}Data on this page are statistics of 2022 unless otherwise noted.

Lincang has made some progress in implementing SDG2, but there is still room for improvement, with the average score increasing from 63.66 points in 2017 to 73.37 points in 2022. It performed well in food safety, with a score of 94.09 points in 2022 for the qualification rate of sampling inspection of edible agricultural products. However, the agricultural labour productivity and grain yield per unit area still need to be improved, with scores of 52.75 points and 52.29 points in 2022, respectively.

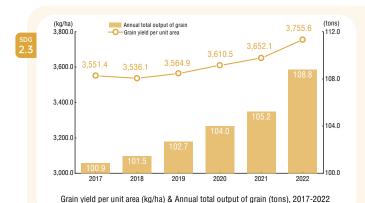




Data source: Lincang Municipal Health Commission

Low weight is one of the most prevalent categories of child malnutrition. To effectively address the problems related to growth retardation and weight loss among children under 5 years of age and to strengthen the management of children's health, Lincang has formulated the Implementation Plan for Healthy Lincang Maternal and Child Health Promotion Actions targeting preschool children's health management.

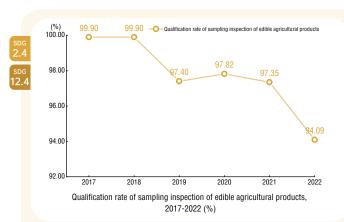
Data show that the underweight rate among children underfive in Lincang City was in a fluctuating downward trend from 2017 to 2021, decreasing from 2.63% in 2017 to 0.92% in 2022.



Data source: Lincang Agriculture and Rural Affairs Bureau

Lincang continues to carry out arable land reclamation actions, accelerate the construction of the Quality Food Project, and take multiple initiatives to promote the stable development of grain production.

Data show that in 2022, Lincang City's annual total output of grain was 1,088,000 tons, with an increase of 79,000 tons over 2017; the grain yield per unit area was 3755.6 kg/ha, with an increase of 204.2 kg/ha over 2017, realizing a double growth in annual total output of grain and grain yield per unit area.



Data source: Lincang Administration for Market Regulation

To guarantee the safety of edible agricultural products, Lincang has strengthened source management and strict quality supervision, gradually enhanced the food safety inspection and testing capacity of each county (district), and comprehensively implemented the testing system for edible agricultural products.

Data show that the qualification rate of sampling inspection of edible agricultural products in Lincang City stabilized at above 97% from 2017 to 2021, while dropped to 94.09% in 2022.

■ Sending Technical Professionals to Rural Areas for Face-to-face Assistance

To enhance local scientific and technological awareness and improve agricultural production skills, addressing the weakness in agricultural and rural development, Lincang has actively implemented the national arrangements of dispatching technical professionals to rural areas. The goal is to popularize agricultural science and technology, spearhead sci-tech innovation and entrepreneurship in rural areas, supporting rural revitalization and sustainable development. In alignment with the development needs of local agriculture and rural areas, Lincang integrates modern factors of production such as science and technology, information, funds and management methods.

The city focuses on constructing demonstration counties under the "One County, One Industry" initiative in Yunnan Province, aiming to cultivate one leading industry in each county. Annually, sci-tech experts are recommended and selected voluntarily from provincial and municipal scientific research institutions, universities,



Figure 5.9 Sci-tech specialist Zhang Dongcheng is guiding villagers to transplant fruit trees

colleges, and enterprises. These professionals then go to the front line of rural production in the eight counties and districts under Lincang's jurisdiction. Their mission involves conducting scientific and technological services and related entrepreneurial activities, targeting on the promotion, dissemination, popularization, and training in advanced and applicable agricultural technologies, equipment, policies, and business management skills in areas such as planting, breeding, and agricultural product processing. Furthermore, Lincang provides financial or project support for recognised technical professionals and implements dynamic management of the work progress.

As of June 2023, Lincang had selected and dispatched 607 provincial-level sci-tech professionals, along with 259 municipal-level sci-tech professionals. The efforts have been concentrated in industries involving coffee, beef cattle, sugar cane, tea, walnut, understory herbs and nuts. The initiative has led to the establishment of more than 18,100 science and technology demonstration households, and the training of over 2,500 high-caliber sci-tech personnel.

Fengqing County Relies on High-quality Germplasm Resources to Enhance the Synergetic Between Walnut Planting and Processing

Fengging County, recognised as the "China Land of Walnut" by the National Forestry and Grassland Administration in 2004, holds a significant position in Yunnan's walnut production. With 1,720,000 mu (114,666.67 hectare) of walnut planting area and a per capita planting area of 4.47 mu (0.298 hectare), the walnut industry is a crucial element in Fengqing's economic landscape. To enhance the synergetic between agricultural planting and processing, Fengqing has focused on improving walnut planting quality. Largescale planting has been achieved through the establishment of cooperatives, the application of agricultural science and technology, and enhanced planting care. Building on this foundation, the county has attracted investments, nurtured enterprise, and established industrial parks to foster the development of deep-processing enterprises. Standardizing production processes, particularly in existing rough processing, ensures a stable supply of raw materials for walnut products.



Figure 5.10 The walnut production line

Meanwhile, Fengqing County has diversified its sales channels by creating regional public brands, introducing sales platforms, and establishing cooperative relationships with well-known enterprises, leading to the establishment of a full industry chain for the walnut sector. The county has also set up the Walnut Full Industry Chain Innovation Research Institute to conduct research in planting, processing, storage, product development, and by-products utilization.

As of 2022, Fengqing County has implemented four types of projects - gathering, driving, supporting, and guaranteeing - to build the Walnut Industrial Park. Key projects include a 150,000-square-metre standard workshop, a 107,000-cubic-metre intelligent cold storage, custodian trading centres, and walnut-based oil processing facilities. The park hosts 22 enterprises, assembling over 40 production lines offering more than 80 products across 20 series. These products are distributed to 15 provinces and regions in China, such as Hebei, Shanghai and Guangdong, and are exported to countries such as Russia, Tajikistan, Kyrgyzstan, and more. In 2022, the county achieved a walnut production of 171 kilotons, generating a comprehensive output value of 4.64 billion Chinese yuan.

SDG3 Good Health and Wellbeing

International community

The United Nations has called on countries to improve the coverage and quality of medical facilities and services, promote health education and preventive measures, and strengthen disease monitoring and control to ensure that by 2030 all people globally have access to essential health care, reducing the children under-5 mortality child and maternal mortality ratio, preventing the spread of preventable diseases, and enabling everyone to enjoy a healthy life.

China

Through scientific health improvement strategies, China has deepened the reform of the medical and health system and improved the health of women, children and other key groups. Focusing on preventing the risk of major infectious diseases, China strives to build a strong public health system, and enhances its capacity to provide all-around and full-cycle health services, thus effectively improves the health and well-being of its people. At the same time, China actively participates in international cooperation in public health, making positive contributions to the implementation of the health-related SDGs.

Lincang



Ensure healthy lives and promote well-being for all at all ages



Everyone has access to quality basic medical services

Through the construction of closeknit county medical and health care communities, implement a hierarchical medical system, and promote the flow of medical resources to remote areas.



100%

99%

97%

Health surveillance and vaccination of key populations are secured

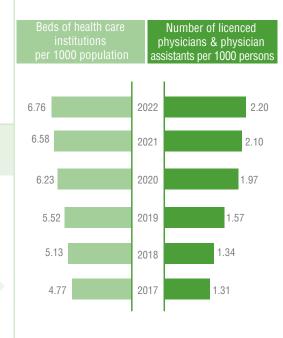
Cervical cancer examination rate among rural women by county (2021)

Examination rate of breast cancer in rural women by county (2021)

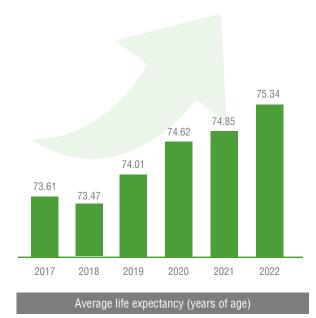
Newborn inherited metabolic diseases screening rate (2021)

Vaccination rates under the National Immunization Programme for eligible children

Steadily expanding medical service resources



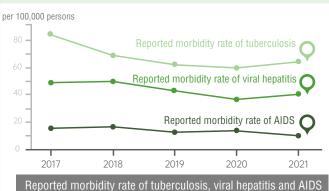
Increasing average life expectancy



A sharp decrease in maternal and infant mortality rates

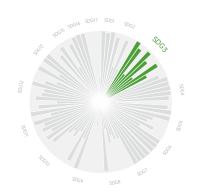
From 2017 to 2021, maternal mortality rate reduced by 48% and infant mortality rate reduced by 35%

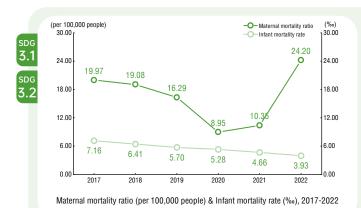
Decrease in reported morbidity rate of notifiable infectious diseases



^{*}Data on this page are statistics of 2022 unless otherwise noted.

Lincang City has performed well in implementing SDG3, with the score gradually climbing from 76.19 points in 2017 to 81.40 points in 2022. In 2022, indicators such as maternal mortality ratio , road traffic death rate, and vaccination rates under the National Immunization Programme for eligible children show excellent performances, with scores of 100 points, 97.64 points, and 94.58 points, respectively. However, more efforts should be made on the reported morbidity rate of notifiable infectious diseases, and the number of licenced physicians & physician assistants per 1000 persons, with scores of 51.37 points and 55.98 points respectively.

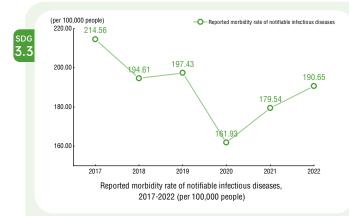




Data source: Lincang Municipal Health Commission

To improve the health of women and children, Lincang City has comprehensively implemented the "Maternal and Child Health Program" and the "Care for Women and Children's Health Action", promoting the sustained healthy development of its maternal and child health undertakings in the city.

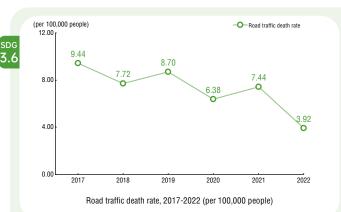
Data show that the maternal mortality ratio was on a downward trend from 2017 to 2020, dropping to 8.95 per 100,000 from 19.97 per 100,000, but slightly rebounded from 2020 to 2022, rising to 24.2 per 100,000 in 2022. The infant mortality rate was on a continuing downward trend, from 7.16 ‰ in 2017 to 3.93‰ in 2022.



Data source: Lincang Municipal Health Commission

Lincang City has effectively responded to the challenges of notifiable infectious diseases and continuously improves the capacity of prevention and control mechanism by carrying out surveillance, prevention and control of notifiable infectious diseases and public health emergencies, enhancing the capacity of emergency response, prevention and control of public health emergencies, and adjusting the prevention and control measures of infectious diseases in accordance with the law.

According to data, the reported morbidity rate of notifiable infectious diseases continued to decline from 2017 to 2020, from 214.56/100,000 to 161.93/100,000; but due to the impact of COVID-19 pandamic, the rate rose from 2020 to 2022.

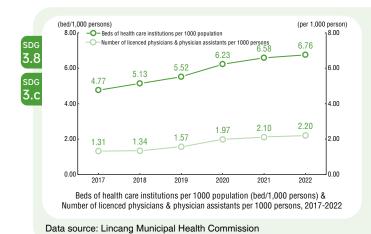


Data source: Lincang Municipal Public Security Bureau

By carrying out road traffic safety improvement actions, Lincang has effectively resolved major road risks and hidden dangers, prevented traffic accidents and maintained the city's road traffic safety situation.

Data show that the overall road traffic death rate in Lincang City from 2017 to 2022 was on a downward trend, from 9.44% in 2017 to 3.92% in 2022, a decrease of 5.52 percentage points.





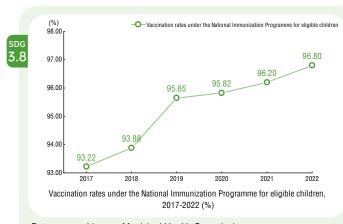
Lincang City improves the capacity of medical and health services and protects people's health by increasing investment in public health care and developing big health industries such as biomedicine, medical devices, health products, medical services and health management.

Data show that from 2017 to 2022, the beds of health care institutions per 1000 population and the number of licenced physicians & physician assistants per 1000 persons in Lincang City continued to grow. The former increased from 4.77/1000 persons in 2017 to 6.76/1000 persons in 2022 and the latter from 1.31/1000 in 2017 to 2.20/1000 in 2022.

Lincang City has continued to strengthen the management of vaccines and preventive vaccination for children's immunization program, gradually expanded the types of

vaccines under the National Immunization Programme

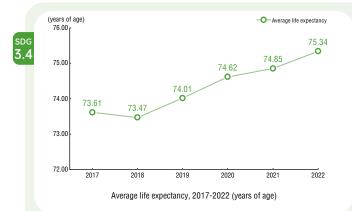
for eligible children, improved the immunization service



system, strengthened the services for left-behind and migrant children, and improved the quality of immunization services, maintaining a high level of vaccination rate under the National Immunization Programme for eligible children.

The data indicate that from 2017 to 2022, the vaccination rates under the National Immunization Programme for eligible children in Lincang City continued to rise, from 93.22% to 96.80%.





Data show that the average life expectancy in Lincang increased from 73.61 years of age in 2017 to 75.34 years of age in 2022, up by 1.73 years.

condition of the people has been improving.

With the continuous development of health care, the health

care system in Lincang has been improving, the fitness infrastructure has been better developed, the health literacy of the residents has been promoted, and the overall health

Data source: Lincang Municipal Health Commission

Yun County's Compact Medical and Healthcare Alliance Efficiently Integrates Medical Resources Across the County

Yun County of Lincang City strives to enhance the medical services and public wellbeing in less-developed multi-ethnic borderland areas. Despite limited resources, Yun County integrates public health services across various institutions, including public hospitals, centres for disease prevention and control (CDCs), maternity and child health centres, and township health clinics. Private hospitals are also encouraged to contribute to health care alliance, promoting resources sharing and collaboration. Led by the People's Hospital of Yun County, this compact medical and healthcare alliance adopts unified management, assessing member medical institutions based on quality and safety. Incentives prioritize frontline public health, high-risk departments, and remote township health centres.

In addition, by applying information technology, Yun County integrate basic medical care, public health services, and digital medical insurance payments through the "Yun County Smart Medical Alliance Information Platform". This platform enhances administrative efficiency and connectivity across different levels of diagnosis and treatment channels. WeChat mini programs linking to the platform allows residents to access online medical consultation, appointments, registration, hospitalization services, and utilize medical insurance, improving medical service accessibility. In 2020, the Yun County compact medical and healthcare alliance and health information service platform won the second prize for Science and Technology Progress in Yunnan Province, and Yun County was further honoured as a national model county for its exemplary efforts in enhancing medical and health services.



Figure 5.11 Li Changmei, a village doctor at Anle Village Health Clinic, Maolan Town, Yun County, is using the medical information service platform



Figure 5.12 Yang Binghong, a national grassroots famous veteran Chinese medicine expert, is teaching remotely over the Internet through an information system

Yulong Community in Linxiang District Established A Home-based Elderly Care Service System to Address Diverse Needs

Established in August 2019, Yulong Community of Linxiang District has developed an inclusive home-based elderly care service system to address diverse needs. Home to the largest government-subsidized housing community in Yunnan Province, Yulong Community accommodates the largest residential and transient population in Lincang City.

In an effort to optimize elderly care services, improve the health service system for seniors, and uplift their overall wellbeing, Yulong Community has implemented various facilities. These include medical and recreational centres and a community canteen, offering services such as medical care, health consultation, rehabilitation treatment, leisure activities, and affordable meals. This comprehensive approach has resulted in the creation of a service system tailored to meet the needs of the home-based elderly care.

To address medical needs, Yulong Community has collaborated with Linxiang District Hospital of Traditional Chinese Medicine to establish the Yulong Community Health Service Centre. Equipped with departments for general practice, traditional Chinese medicine and rehabilitation treatment, the centre features 50 nursing beds dedicated to elderly care, facilitating an effective connection between medical health and elderly care services. In 2022, the Yulong Community Health Service Centre and Linxiang District Hospital of Traditional Chinese Medicine were designated as the demonstration institution for community (township) level integrated health and elderly care by the Yunnan Provincial Health Commission.

In terms of home services, Yulong community leverages information technology to create health records for residents aged 60 and above. Smart bracelets with health monitoring, early warning alerts, and one-click call for help functions are provided to seniors with health concerns. This technology facilitates timely notifications to family members and community staff when the elderly person is away for 12 hours without returning. Additionally, the community's intelligent service platform offers a range of services, including calling contracted doctors for home visits, arranging for service personnel to deliver goods and meals, providing companionship, and assisting with daily tasks like laundry and cooking.





Figure 5.13 Yulong Community's residents are in the health centre and community canteen

The "One Household, One Plan" Customized Programme Provides Barrier-free Renovation for Families with Severe Disabilities

Lincang prioritizes the wellbeing of disabled individuals and the public in the city, focusing on barrier-free renovations for families with severe disabilities. Recognizing this initiative as a key grassroots services project, Lincang engages with families with disabilities directly to understand their specific needs through thorough communication and inquiries. The programme ensures eligibility and willingness for renovation, fostering a joint agreement on the customized plan for each household. This personalized approach enhances satisfaction by tailoring solutions to individual requirements. Lincang adopts a unified government procurement approach, selecting construction units with a strong reputation, advanced technology, and a caring attitude through public processes. After the project's completion, barrier-free transformation signs are prominently displayed, providing contact information for both the project implementation unit and construction unit. This transparency facilitates effective communication and prompt resolution for any issues or concerns that may arise during use. From 2011 to June 2023, Lincang City has invested a total of 21.07 million Chinese yuan in the successful execution of barrier-free renovation for 3,533 families with severe disabilities.







Figure 5.14 Yang Xinmei and her husband are using barrier-free facilities at home in Wenhua Community, Linxiang District, Lincang City

SDG4 Quality Education

International community

The United Nations advocates that countries enhance global education standards by expanding the coverage and quality of educational facilities and services, promoting equity and inclusion in education, strengthening teacher training and education management, to offer equal and high-quality educational opportunities for all, realizing the full development of individual potential.

China

China adheres to the strategy of giving priority to developing education, giving priority to education development in economic and social development plans, ensuring investment in education with financial funds, and giving priority to the allocation of public resources to meet the needs for human resource development, so as to promote the development of China's education in a more inclusive, equitable, and high-quality direction.

Lincang

Lincang has improved education infrastructure in both urban and rural areas, addressed the weaknesses in compulsory education, enhanced the quality of modern vocational education, and established the funding system for students



Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all



Preschool education resource coverage continues to expand

Proportion of inclusive kindergartens amounts to 98.69%

Gross enrollment rate of the first three-year of schooling before elementary school amounts to

93.02%

Compulsory education is heading towards a high-quality and balanced stage

Consolidation rate of compulsory education

99.04%

New construction, renovation, and expansion of outdoor sports fields

285,300 square metres

Completed fixed asset investment in the past three years

2.142 billion yuan

New construction, renovation, or expansion of school buildings

585,800 square metres

Opportunities for vocational and higher education have increased



High school gross enrollment rate



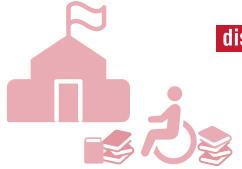
Employment rate of vocational school graduates

The number of people acquiring skills necessary for employment and entrepreneurship has increased

A cumulative total of 320,000 person-times rural poverty-stricken workforce have been **trained**, and 150,000 persons have achieved **employment transfers**.

The influence of **labour brands** such as "Lincang Housekeeper" and "Va Mountain Artist" has expanded. (2016—2020)





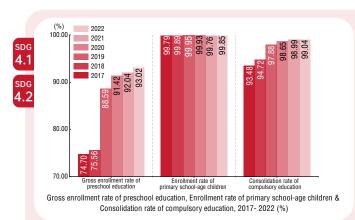
The right to education of disadvantaged groups is effectively protected

The citywide enrollment rate of students with disabilities in the compulsory education stage is 99.95%

^{*}Data on this page are statistics of 2022 unless otherwise noted.

Lincang city has made some progress in implementing SDG4. The assessment score improved from 84.77 in 2017 to 88.85 in 2022. In 2022, the indicators of enrollment rate of children with disabilities in compulsory education, enrollment rate of primary schoolage children, and student-teacher ratio in primary education performed well, with scores of 99.95, 99.68, and 99.25 respectively.

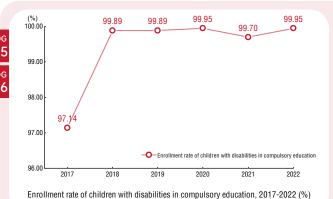




Data source: Lincang Municipal Education and Sports Bureau

Lincang city constantly refines its public education service system, ensuring eligible children receive preschool and compulsory education, advancing the balanced development of basic education, and effectively increasing children's educational opportunities.

Data show that in Lincang city, the gross enrollment rate of preschool education rose from 74.70% in 2017 to 93.02% in 2022. The consolidation rate of compulsory education increased from 93.48% in 2017 to 99.04% in 2022. The enrollment rate of primary school-aged children has consistently remained above 99.70%.

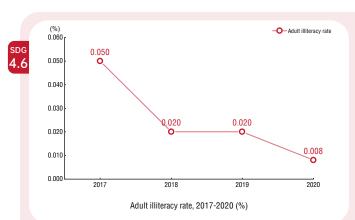


, , ,

Data source: Lincang City Education and Sports Bureau

Lincang city, by advancing the standardized construction of special education schools, improving conditions of running schools, and enhancing teaching quality, effectively upholds the educational rights of children with disabilities.

The data demonstrate that from 2017 to 2022, the enrollment rate of children with disabilities in compulsory education displayed a noticeable rising trend from 97.14% to 99.95%.

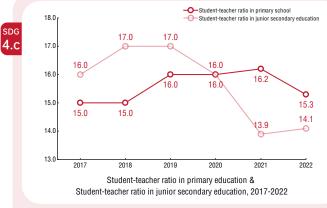


Data source: Lincang City Education and Sports Bureau

Through strengthening the construction of community education institutions, promoting the development of community education and elderly education, Lincang city has established an adult learning education system that covers city, county, township, and village levels, and therefore effectively reduced adult illiteracy rates and enhanced the overall quality of the population.

Data show that from 2017 to 2020, the adult illiteracy rate has continuously declined from 0.05% to 0.008%.

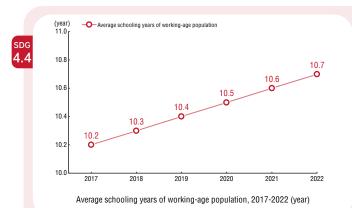




Data source: Lincang City Education and Sports Bureau

By implementing projects to improve weakness in compulsory education and enhancing capabilities, scientifically and rationally planning the layout of compulsory education schools, and continuously optimizing the structure of teaching staff and other measures, Lincang city continually adjusts the student-teacher ratio.

Data indicate that from 2017 to 2022, the student-teacher ratio in primary education increased from 15.0 to 15.3. Meanwhile, the student-teacher ratio in junior secondary education showed a fluctuating downward trend from 16.0 to 14.1.



Data source: Lincang City Education and Sports Bureau

Through continually popularizing senior high school education, increasing the enrollment rate of higher education, and enhancing the adaptability of vocational technical education, the average schooling years of working-age population in Lincang city keeps increasing.

Data reveal that the average schooling years of workingage population has been growing annually, rising from 10.2 years in 2017 to 10.7 years in 2022.

Yongde County Integrates Educational Resources, Establishing A Cross-school Alliance to Improve the Overall Quality of Primary School Education and Teaching

Yongde County in Lincang City has undertaken significant efforts to address educational disparities and enhance the overall quality of primary school education. Facing challenges such as inadequate basic educational infrastructure and a severe shortage of teachers, the county established a cross-school alliance led by Yongde County Chengguan Complete Primary School, encompassing over 100 primary schools in 3 towns and 7 villages in 2021. The alliance leveraged shared educational resources and collaborative initiatives, leading to a more standardized school management and educational approach, effectively contributing to the balanced development of compulsory education in Yongde County.

Building on the success of the alliance, Yongde further pioneered a comprehensive integrated management



Figure 5.15 Township primary schools held seminars to improve teaching skills

model for primary school education in 2022. Under the unified management of education and teaching led by Yongde County Chengguan Complete Primary School, the county's primary schools engaged in regular principal forums to exchange experiences, fostering mutual learning and elevating overall school management standards. Yongde County Chengguan Complete Primary School played a pivotal role in supporting other schools, forming teacher support teams, conducting regularly visits, and customizing individualized support plans. The actions facilitated the strategic allocation of teaching resources and enhanced the capabilities of rural teachers.

The initiative extended beyond resource-sharing, with Yongde County Chengguan Complete Primary School guiding member schools in exploring and incorporating rural educational features into tailored campus cultural activities. By integrating existing educational resources, Yongde County successfully narrowed the educational development gap between urban and rural areas.

In the 2021-2022 academic year, Yongde county' commitment to improving educational quality yielded tangible results. The overall teaching quality of all primary schools in Yongde county ranked third among 8 counties (districts) in the city's educational quality assessment. Furthermore, Yongde County Chengguan Complete Primary School's graduating class achieved the top ranking among 17 county (district) directly-affiliated primary schools in the city, with 49 primary schools demonstrating improvement in their rankings compared to 2021.

Cangyuan Autonomous County Enhances the Quality and Balance of Compulsory Education by Focusing on Cultural and Sports Education

As the largest Va ethnic settlement in China, with 85% of the population being Va ethnic, Cangyuan Autonomous County has integrated contemporary educational concepts with traditional ethnic culture, considering the natural talents of Va students' in singing, dancing, and physical activities. To achieve holistic development, Cangyuan launched specialty training activities aiming for each student to excel in writing, basic drawing, sports, and have preliminary musical skills. Noteworthy, achievements include successes in football, tennis, choir, and children's coding education.

Between 2016 to 2019, through provincial sports events and competitions, the county observed outstanding physical prowess in youth athletes. In 2020, Mengdong Town Central Complete Primary School in Cangyuan initiated the first football experimental class in Lincang, and by 2022, two football teams from this class secured championships in their debut provincial competition. The football programme has since expanded to 3 classes with 103 students. In tennis, Cangyuan Autonomous County has 30 students in training, collectively winning 166 national championships, with 4 female players selected for the national junior tennis reserve team. Additionally, the county established a choir comprising 100 Va students in 2022, and their performances, including pieces like "Va Mountain Youth", gained widespread popularity.



Figure 5.16 Students of the football experimental class in Mengdong Town Central Complete Primary School conduct daily training



Figure 5.17 Teacher Chen Yuanchun is explaining the coding methods in the primary programming class in Mengdong Town Central Complete Primary School

"Silver Age Teaching Plan" Elevates Teaching Standards in Remote Primary Schools

Launched nationwide in 2018 to address the shortage of high-quality teaching resources in underdeveloped areas and enhance educational quality, the "Silver Age Teaching Plan" involves recruiting outstanding retired teachers to teach in rural compulsory education schools in impoverished areas. Responded actively to the national and Yunnan provincial governments' inititative, Lincang introduced a plan to bring in exceptional retired teachers. Through educational talent recommendation fairs, the establishment of urban-rural educational exchange platforms, and the enhancement of welfare mechanisms, Lincang attracted retired principals and teachers from ordinary high schools in Shanghai, Shandong, Hubei, and Kunming in Yunnan. Cangyuan Autonomous County took proactive measures, recruiting 8 retired teachers from Kunming to form an expert group. This group taught at Cangyuan Va Autonomous County Mengdong Town Central Complete Primary School and Cangyuan Va Autonomous County Ethnic Primary School from December 2020 to December 2021. The expert group maximized the expertise of retired teachers, focusing on classroom teaching activities and providing guidance through special lectures, classroom observation, feedback, and demonstration lessons.

Their efforts supported the healthy growth of students, contributed to the improvement of education quality, facilitated teachers' professional development, and fostered holistic student development. In 2021, Mengdong Town Central Complete Primary School earned recognition as a provincial-level civilized campus, demonstrating the positive impact of the "Silver Age Teaching Plan".



Figure 5.18 "Silver Age" teachers observe a class in Cangyuan Va Autonomous County Ethnic Primary School



Figure 5.19 Launch ceremony of the "Silver Age work team" to Cangyuan Va Autonomous County Ethnic Primary School and Mengdong Town Central Complete Primary School

SDG5 Gender Equality

International community

The United Nations calls for the formulation and implementation of gender equality policies and laws, the promotion of gender education and ideology, and the enhancement of gender statistics and research. The aim is to promote global gender equality by 2030, eliminate all forms of gender discrimination and violence, and ensure that women can fully develop in all fields.

China

China has always adhered to the basic national policy of equality between men and women, fully taking into account gender differences and women's special interests when enacting laws, formulating policies, drafting plans and making arrangements for work, and has included the development of women and children in the overall economic and social development plan for coordinated advancement, ensuring that women's rights in all fields of political, economic, cultural, and social life are effectively protected.

Lincang

Lincang City has strengthened the protection of women's and children's health, education, social welfare, and legal rights. The levels of health, education, and social security of women and children have been significantly improved, and the social environment for the development of women and children's affairs has been further optimized.



Achieve gender equality and empower all women and girls



Provide financial and training support for women's entrepreneurship employment









Loan support

Entrepreneurial services

Tax deductions

Financial subsidies

Launching the "New Era Women's Classroom" to enhance women's capabilities of entrepreneurship and employment





Girls' Right to

Education is Protected

For 5 consecutive years, the net enrollment rate of primary school-age girls has been higher than 99.78%.



The assistance and rescue mechanism has been improved

Emphasis on care services for key groups and families, as well as mechanisms for conflict and dispute resolution

Cooperation mechanisms for promoting the protection of rights and interests of women and children

Supervision mechanism for women and children's infringement cases

Expanding channels for women's participation in politics. ensuring women's political rights

35.35%

The proportion of women in Municipal People's Congress

The proportion of female members in the Lincang Municipal Committee of the Chinese 42.50% People's Political Consultative Conference

35.79%

The proportion of women in Lincang's civil servants

The proportion of women in urban community resident committee members



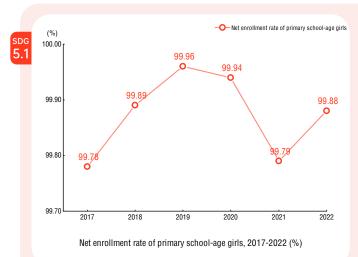
45.56%

The proportion of women in village committee

^{*}Data on this page are statistics of 2022 unless otherwise noted.

Lincang City has made positive progress in implementing SDG5, with an assessment score of 82.60 in 2022. Among all the indicators, the net enrollment rate of primary school-age girls scored the highest, at 99.88 points; the proportion of seats held by women in the Municipal People's Congress and the Chinese People's Political Consultative Conference scored 77.05 points, and the percentage of women in civil servants scored 70.88 points.



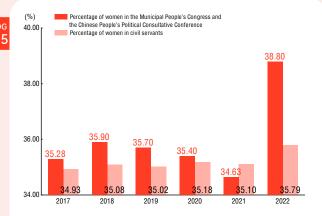


and actively carrying out educational publicity activities, has effectively ensured the enrollment rate of primary schoolage girls, promoting the overall development of society and the realization of gender equality.

Lincang City, by providing financial assistance to poor girls

Data show that the net enrollment rate of primary schoolage girls from 2017 to 2022 has consistently remained above 99.50% with a fluctuating upward trend, rising from 99.78% to 99.88%.

Data source: Lincang Municipal Women's Federation



Proportion of seats held by women in the Municipal People's Congress and the Chinese People's Political Consultative Conference & Percentage of women in civil servants, 2017-2022 (%)

Data source: Lincang Municipal Women's Federation

Through formulating and improving policies for training and selecting female cadres, Lincang City has trained and selected a large number of outstanding women officials to participate in decision-making and management roles.

Data show that from 2017 to 2022, the proportion of seats held by women in the Municipal People's Congress and the Chinese People's Political Consultative Conference showed a fluctuating upward trend, rising from 35.28% to 38.80%. From 2017 to 2022, the percentage of women in civil servants also showed an upward trend, increasing from 34.93% to 35.79%.

■ Lincang City Ensures the Lawful Rights and Interests of Women and Children

Lincang is committed to ensuring the rights of women and children, focusing on health, education, welfare, and political participation, to create a more equal, inclusive, and sustainable social development environment. Over three development cycles starting from 1995¹, the city integrated women's and children's development into overall social and economic planning. Between 2011 and 2020, there were notable improvements in the health and education levels of women and children. The education gender gap narrowed, and the completion rate of nine-year compulsory education exceeded 98% by 2020, showing a 12% increase from 2010. Social security coverage, particularly basic medical insurance, exceeded 96%, enhancing the wellbeing of women and children.



Figure 5.20: Lahu ethnic women from Nanmei Township in Linxiang District participating in grassroots election

Efforts to promote women's participation in decision-making and management roles were successful, with over 60% female representation in the leadership teams of city-level government departments for four consecutive years. Legal measures to protect the rights of women and children were intensified, with legal aid institutions established at various levels. Between 2011 and 2020, legal aid benefited 1,672 minors and 13,619 women.

In 2022, the city introduced the fourth cycle of development plans, the "Lincang Women's Development Plan (2021-2030)" and the "Lincang Children's Development Plan (2021-2030)", aligning the development of women and children in ethnic border areas with economic and social special plans. The emphasis remains on equal access to basic public services and strengthening protection in health, education, social welfare, and legal rights.

Various Women's Federation Platforms Actively Contribute to Social Governance at the Grassroots Level

To empower women, bridge their role in families and communities, and support rural women in public decisionmaking and rural revitalization, Lincang City has established women's organisation platforms such as "Women's Homes" and "Women's Micro Homes", at county (district) and village (community) levels. These platforms are equipped with essential resources and able to organise cultural activities, training sessions on various topics like laws regulations, environmental protection, family education, emergency rescue, agricultural skills, and health. For example, under the support project from Chongming District of Shanghai City to Lincang City, five "Chong-Xiang Sisters' Micro Homes" were established in Linxiang District. These micro homes feature female volunteer teams in rural communities, offering personalized services to address issues such as marriage and family conflicts and caring for vulnerable groups.



Figure 5.21: "'Chong-Xiang Sisters' Micro Home" in Qinghua Community, Mangpan Street, Linxiang District, conducting cultural heritage activities on the Dai ethnic elephant-foot drum making

The initiative also encourages local women to enhance their living environment by planting flowers and creating appealing landscapes in their courtyards. In 2022, the "Chong-Xiang Sisters' Micro Homes" organised over 60 activities, collected valuable suggestions, resolved disputes, and engaged over 600 participants, showcasing the impactful role of grassroots women's federations in rural social governance.

¹ This refers to the Ninth Five-Year Plan for Women's Development in Lincang Region and the Ninth Five-Year Plan for Children's Development in Lincang Region (first cycle, 1996-2000), the Lincang Region Women's Development Plan (2001-2010) and the Lincang Region Children's Development Plan (2001-2010) (second cycle), and the Lincang Women's Development Plan (2011-2020) and the Lincang Children's Development Plan (2011-2020) (third cycle).

SDG6

Clean Water and Sanitation

International community

The United Nations advocates for countries to improve the efficiency and quality of water resource utilization, strengthen monitoring and protection of water resources, promote water conservation and reuse of water resources, aiming to ensure sustainable utilization and management of global water resources by 2030.

China

China has implemented the strictest integrated water resources management plan, further optimized the system of integrated water resources management, and continuously improved the water environment system. At the same time, China continues to promote the construction of water supply and sanitation infrastructure, significantly improving the drinking water and sanitation conditions for rural residents.

Lincang

Lincang City continuously promotes efforts in water-saving and efficiency improvement in agriculture, rural water supply security, and industrial water discharge reduction, and makes efforts to build a water-saving society, promote soil and water conservation supervision, and enhance soil erosion control and water ecology protection, and provide strong water security for Lincang's high-quality leapfrog development.



Ensure availability and sustainable management of water and sanitation for all



Strengthen the construction of river and lake management systems

Coordinate the systematic governance of mountains, rivers, forests, farmlands, lakes, grasslands, and deserts

Focusing on flood control infrastructure construction, river ecological restoration. and daily maintenance, the rivers and lakes would be well harnessed.

Surface water segments and drinking water sources have maintained excellent quality

From 2017 to the first half of 2023 Lincang City has a 100% water quality excellence rate at the national controlled segments of the Lancang River and Nu River systems



The compliance rate for centralized drinking water source quality in cities reached

100%

The compliance rate for centralized drinking water source quality in core area of the city reached







Ensure rural residents' access to clean water and safe water

rural drinking water projects 22,453

Proportion of rural residents benefiting from centralized water supply 90%

(2020)

Coverage rate of rural population with access to tap water

85%

Water and environmental sanitation are continuously **improving**



The urban domestic sewage treatment rate 99.9%



The sewage management rate in administrative villages

47.7%



Rural domestic waste treatment facility coverage 60.9%

The water efficiency of various industries continues to improve

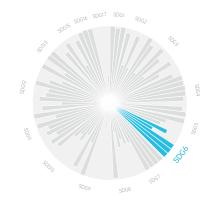
In the past decade, water consumption per unit GDP has decreased by 53%

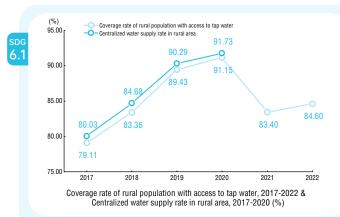
Water consumption per 10,000 yuan of industrial added value has decreased by 54%



^{*}Data on this page are statistics of 2022 unless otherwise noted.

Lincang City's overall performance in implementing SDG6 is outstanding, with the assessment score rising from 76.63 in 2017 to 89.41 in 2022. In 2022, the compliance rate for centralized drinking water source quality in cities and the proportion of surface water of Grade III or better quality both scored 100 points. However, there's room for improvement in areas such as the coverage rate of rural population with sanitary toilet.

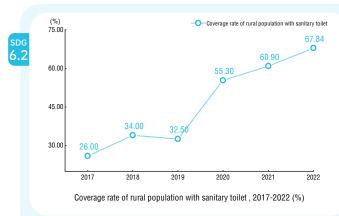




Data source: Lincang Municipal Water Affairs Bureau

By continuously strengthening the protection of drinking water sources and improving the long-term operation and maintenance mechanism of drinking water projects, Lincang City has made notable improvements in the safety of drinking water for rural residents, and has significantly improved the level of drinking water security in rural areas.

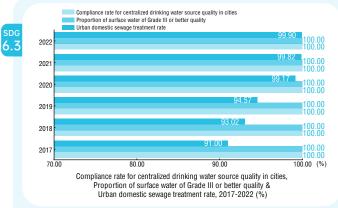
Data show that from 2017 to 2020, the proportion of rural residents benefiting from centralized water supply increased from 80.03% to 91.73%. Starting from 2021, efforts were made to integrate urban and rural water supplies, and by 2022, the coverage rate of rural population with access to tap water¹ reached 84.60%.



Data source: Lincang Municipal Agriculture and Rural Affairs Bureau

Lincang City has significantly increased the coverage rate of rural population with sanitary toilet and improved the sanitary conditions of rural residents by continuously promoting rural toilet renovations and village cleaning campaigns.

Data show that from 2017 to 2022, the coverage rate of rural population with sanitary toilet exhibited a significant upward trend, increasing from 26.00% to 67.84%.



Lincang City, by strengthening the protection of drinking water source areas, enhancing water quality testing and monitoring, and promoting the construction of urban domestic sewage treatment facilities, has restored the functions of water ecosystems and improved water quality, as well as the urban domestic sewage treatment rate.

Data show that from 2017 to 2022, both the compliance rate for centralized drinking water source quality in cities and the proportion of surface water of Grade III or better quality remained at 100% for six consecutive years. From 2017 to 2022, the urban domestic sewage treatment rate continuously rose, increasing from 91.00% to 99.90%.

Data source: Lincang Ecology and Environment Bureau, Lincang Water Affairs Bureau, Lincang City, and Lincang Housing and Urban-rural Development Bureau

¹ Tap water prevalence before 2020 refers to 20 or more people, and after 2021 it refers to 100 or more people.

■ Public Places Equipped with Handwashing Facilities to Promote Sanitary Habits

A special initiative was undertaken from 2020 to 2021 to enhance the construction of public handwashing facilities, focusing on various locations such as schools, health and medical establishments, agricultural markets, parks, transport stations, airports, tourist areas, highway service areas, indoor public places, urban main roads and secondary main road, built-up area in townships, model villages, and villages along highways. The comprehensive construction, renovation, and upgrading of handwashing facilities aim to encourage the public to adopt habits of "wash your hands frequently, and pay attention to hygiene". This initiative plays a crucial role in reducing the spread of infectious diseases through hand contact. Lincang had planned to build 4,775 handwashing facilities, and by the end of May 2021, they exceeded expectations by completing 5,409 facilities, achieving 132% of the planned target. The outcome reflects the city's commitment to public health and sanitation management in both urban and rural areas.







Figure 5.22 Handwashing facilities in public places with promotion signs

Promoting Sanitary Toilets for Rural Wellbeing

Lincang City initiated a project in 2018 to improve rural hygiene conditions by promoting the widespread adoption of sanitary toilets. The initiative began with an in-depth survey to assess the current state of rural toilets and understand public needs. Using the research findings, the city formulated an implementation plan that considered geographical, climatic, economic factors, and local customs. The selection of cost-effective, technologically mature, and publicly accepted models adhered to construction standards throughout the plan's execution. Simultaneously addressing rural faecal treatment, Lincang implemented diverse collection and treatment methods based on local conditions, including decentralized, relatively centralized, or integration into the urban pipe network. Waste collection and utilization were carried out on-site or through nearby resource utilization, enhancing the overall resource utilization rate.



Figure 5.23 On-street public toilets in Qinghua Community, Linxiang District, equipped with handwashing facilities and promotion materials

By 2022, Lincang City successfully achieved its goal of installing at least one public sanitary toilet in each administrative village (community). This included the construction of 411 public sanitary toilets in natural villages with over 100 permanent households and 346,000 sanitary toilets in rural households, achieving a 67.84% popularization rate for household sanitary toilets citywide.

SDG7 Affordable and Clean Energy

International community

The United Nations calls for the promotion of global clean energy utilization and reduction of dependence on fossil fuels by 2030 through strengthening research and application of clean energy, promoting policies and laws for clean energy, and enhancing the marketization and popularization of clean energy.

China

The Chinese government has been actively building a clean, low-carbon, safe, and efficient energy system, accelerating energy mix readjustment, continuously upgrading clean energy equipment and technology, significantly improving the production and living conditions of residents across the country, and basically eliminating the problem of energy poverty.

Lincang

Lincang City has a variety of renewable energy sources, including hydropower, wind energy, solar energy, biomass energy, and geothermal energy. Especially, by making full use of the advantages of abundant hydropower resources and favourable development conditions, Lincang steadily enhances hydropower production capacity and quality, accelerates the development and utilization of new energy, establishes and improves the green clean energy supply system, and cultivates the capacity of green clean energy accommodation.



Ensure access to affordable, reliable, sustainable and modern energy for all



Promote shared access to modern energy

Guide **rural energy consumption**towards a gradual transition
to electricity and gas, **the population**

with access to electricity reached



Promote efficient use of energy with a continuous decline in unit energy consumption

In the last five years,
the energy consumption
per 10,000 yuan of GDP has decreased
by an average of 6% annually

Develop clean energy industries

Consolidate hydropower, promote photovoltaic development, appropriately develop wind power, and extend the energy industry chain

Advance the "integration of wind, solar, hydro and energy storage" approach

The proportion of installed capacity of green power dominated by hydropower





As of June 2023, Lincang City has completed the construction of 131 hydropower stations. The installed capacity of green electricity is 9.7704 million kilowatts (including a hydro-power installed capacity of 8.4323 million kilowatts)

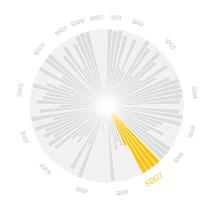
Exporting clean energy to Myanmar

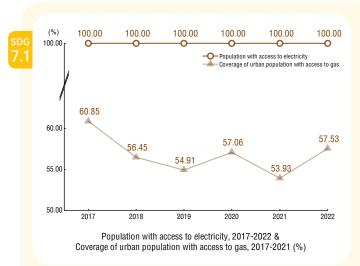
More than

1 billion kilowatt-hours of electricity are transmitted to Myanmar annually

^{*}Data on this page are statistics of 2022 unless otherwise noted.

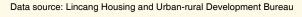
Lincang City has performed excellently in terms of SDG7. From 2017 to 2022, it consistently maintained a high level. In 2022, the overall assessment score was 91.39 points, with scores of 100 points for the population with access to electricity, the renewable energy as a percentage of total electric power generation and energy consumption per 10,000 yuan of GDP. The score of the coverage of urban population with access to gas is relatively low with a room for improvement.

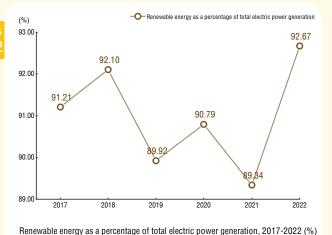




Lincang City has vigorously carried out the construction of distribution network automation, accelerated the renovation and upgrade of aging urban gas pipelines, and established and improved the information system for specialized networks such as urban gas pipelines.

Data show that from 2017 to 2022, the population with access to electricity in Lincang City remained stable at 100%, and the coverage of urban population with access to gas remained above 53%.





Data source: Lincang Development and Reform Commission

Lincang City has steadily enhanced its hydro-power production capacity and quality. It actively promotes the development and utilization of new energy sources such as photovoltaic and wind power, actively develops the clean energy industry, establishes and improves the green clean energy safe supply system, and continuously increases the renewable energy as a percentage of total electric power generation.

Data shows that from 2017 to 2022, the renewable energy as a percentage of total electric power generation in Lincang City always maintains a high level, with 91.21% in 2017 and 92.67% in 2022.

■ Yun County's Push for Photovoltaic Industry to Boost Rural Development

Yun County in Lincang City, endowed with abundant solar power resources, has been promoting the development of clean energy industries since 2021. With an annual solar radiation of 5,500~6,000 megajoules/square metre and a sunshine rate exceeding 50%, the county has attracted investments and forged collaborations with 6 large energy enterprises. As of July 2023, Yun County has registered 19 photovoltaic projects, accomplishing 7 grid-connected projects with a total installed capacity of 777 megawatts. The county's innovative approach includes integrating the new energy industry with characteristic agriculture, utilizing land under photovoltaic panels for cultivating Chinese herbal medicine. This collaborative effort, involving photovoltaic enterprises and local farmers, contributes to an increase in income for surrounding community collectives and farmers. By 2025, it is anticipated that new energy projects will generate over 5 million Chinese yuan in collective economic operation income for villages.



Figure 5.24 Yun County integrates the development of the photovoltaic industry with characteristic agriculture

Xiaowan Hydropower Plant Provides Fundamental Support for Regional Power Supply

The Xiaowan Hydropower Plant, a key project outlined in *National 10th Five-Year Plan (2001-2005)* and a landmark initiative for implementing the Great Western Development Strategy in Yunnan Province, plays a vital role in leveraging the hydropower resources of the Lancang River. Situated at the junction of Nanjian County, Dali Prefecture and Fengqing County, Lincang City, the construction of Xiaowan began in 2002, with all units connected to the grid by 2010. With a survey period of nearly 30 years and a construction period of nearly 10 years, the hydropower plant is a collaborative effort involving 30 towns and townships across 8 counties and districts in 3 prefectures and cities. Boasting a total installed capacity of 4.2 gigawatts and an average annual electricity generation of 19 billion kWh, Xiaowan has been instrumental in China surpassing 200 gigawatts of hydropower installed capacity, securing its position as a global leader. Xiaowan hydropower plant has effectively addressed longstanding challenges such as power shortage during dry seasons and water abandonment during flood season in Yunnan.

Beyond power generation, Xiaowan serves multifunctional roles including food control, irrigation, sediment retention, and navigation. The construction of large hydropower plants like Xiaowan provides foundational support for green energy development and the establishment of a green energy base in Lincang City.



Figure 5.25 View of Xiaowan Hydropower Plant

SDG8 Decent Work and Economic Growth

International community

The United Nations advocates for countries to strengthen economic structural transformation and upgrading, promote innovation and entrepreneurship, promote employment and income growth, promote inclusive and sustainable global economic growth, creating employment and decent work for all, and improving living standards.

China

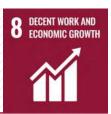
The Chinese government continues to improve macroeconomic governance, maintain policy consistency, stability, and sustainability, and implemented measures such as innovation-driven development strategies, optimized the environment for innovation and entrepreneurship, energized market entities, and promoting productive employment through multiple channels. Against a large base, the Chinese economy has achieved generally stable growth while making further progress.

Lincang City deeply implements action plans for the development of key areas

Lincang

such as agricultural modernization, foreign trade, business environment, and private economic development. It promotes employment of key groups such as college graduates, rural migrant workers, and those with employment difficulties, and implements the policy of unemployment insurance refunds; expands the scope of support for guaranteed loans for entrepreneurship, and supports innovation and entrepreneurship of market entities such as micro, small and medium-sized enterprises(MSMEs) and self-employed households, so as to promote the continuous improvement of quality and rapid growth of quantity of the economy. The Implementation of the UN Sustainable Development Goals: Lincang's untary Local Revie

Promote sustained, inclusive, and sustainable economic growth, full and productive employment and decent work for all



Cultivate five "hundredbillion level" industries

- Plateau characteristic modern agriculture
- Processing and trade industry
- Biomedicine and big health industry
- Cultural tourism
- Digital economy industry



Innovate and foster emerging industries

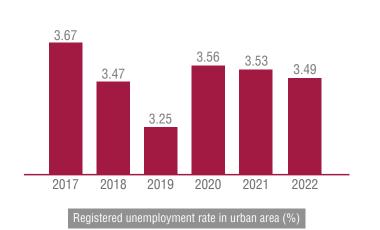
- New material industry dominated by germanium
- New energy industry
- Manufacturing industry dominated by exportoriented light textiles
- Information industry
- Energy-saving and environmental protection industry

Multi-channel promotion of productive employment

- Intensify vocational skill training
- Implement guaranteed loans and subsidies for employment entrepreneurship
- Transfer employment through collaboration between the eastern and western regions
- Create labour brands



The registered unemployment rate in urban area remains at a relatively low level



The economy maintains a medium-high growth rate

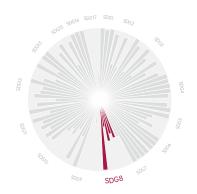
From 2017 to 2022, the per capita GDP grew at an average annual rate of 8.14%, reaching 44,723 Chinese yuan/year in 2022_____

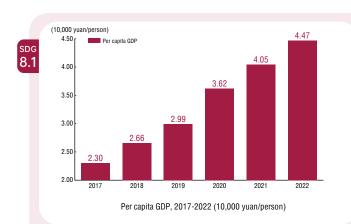
There is still immense room for industrial development

The ability to convert advantageous resources is weak, the industry level is low, the innovative capacity is insufficient, and the degree of agglomeration is not high

^{*}Data on this page are statistics of 2022 unless otherwise noted.

Lincang City has made significant progress in implementing SDG8. The assessment score gradually increased from 43.77 points in 2017 to 60.55 points in 2022. In 2022, the scores for the registered unemployment rate in urban area, overall labour productivity, and per capita GDP were 38.69 points, 49.62 points, and 56.64 points respectively, while the score for the deaths in safety production accident per 100 million yuan GDP was 98.68 points.

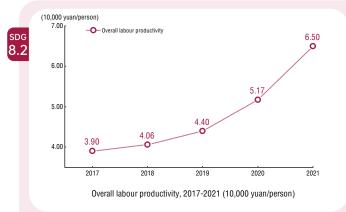




Data Source: Licang Municipal Statistics Bureau

Lincang City promotes the development of fields such as the real economy, commerce and consumption, and development zone construction through policy guarantees and support, encourages entrepreneurship and innovation, stimulates market vitality and promote sustained economic growth.

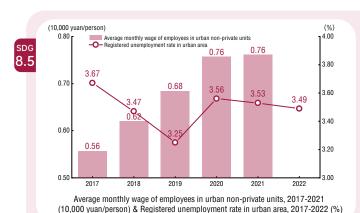
Data show that from 2017 to 2022, Lincang City's per capita GDP grew significantly from 23,000 yuan/person to 44,700 yuan/person.



Data Source: Lincang Municipal Statistics Bureau

Lincang City continuously improves resource utilization efficiency and reduces costs. It promotes a shift in the economic development model from extensive growth based on scale and speed to intensive growth focused on quality and efficiency. The overall labour productivity has been consistently increasing.

Data show that from 2017 to 2021, the overall labour productivity of Lincang City continuously rose, increasing from 39,000 yuan/person to 65,000 yuan/person.



Data Source: Lincang Municipal Statistics Bureau

Lincang City earnestly implements the employment-first policy, improves the public service system for employment and entrepreneurship, improves the salary and benefts of employed personnel, and ensures the overall stability of the employment situation.

Data indicate that from 2017 to 2021, the average monthly wage of employees in urban non-private units continued to rise, growing from 5,600 yuan/person to 7,600 yuan/person. The registered unemployment rate in urban area fluctuated and decreased, dropping from 3.67% in 2017 to 3.49% in 2022.

■ Inherit and Make Use of Traditional Festivals to Highlight Local Cultural Tourism Development

Lincang City strategically leverages its rich ethnic cultural resources by integrating traditional festivals into cultural tourism development. The city's brand "A Great Place in the World Va Region: Visit Lincang for Summer and Winter Retreats", reflecting a targeted approach to attract visitors year-round.

The city has also organised local events with distinct characteristics such as the Linxiang District Asian Microfilm Art Festival, Yun County Lancang River Beer Carnival, Fengqing Black Tea Festival, Yongde "Mango Hometown" Cultural Tourism Festival, Sangzhe Li Cultural Tourism Festival, Zhenkang International "Ashuse" Mountain Song Conference, Gengma Water Culture Tourism Festival, China's Va Ethnic New Rice Festival, Qingmiao Festival, Cangyuan Va "Moh Nin Hei" Festival, Shuangjiang Ice Tea Meeting, China-Myanmar Border Economic Trade Fair, and



Figure 5.26 "Moh Nin Hei" Festival (Face-Smearing Festival), Cangyuan Va Autonomous County

the Va Mountain Local Cuisine Festival, showcasing the city's unique cultural offerings. Mobilizing local communities, enterprises, media, and other social entities, Lincang has progressively enhanced the quality, scale, and promotion of ethnic festivals.

While presenting local customs, protecting local cultural characteristics and addressing the diverse intellectual and cultural needs of all ethnic groups, Lincang has enriched its rural tourism products. This approach not only attracts tourists from various locations but also generates employment opportunities and income for ethnic communities in rural areas.

The effectiveness of these efforts is reflected in the tourism statistics for the first half of 2023, with the city welcoming 16.746 million domestic and foreign tourists, achieving a tourism revenue of 14.4 billion Chinese yuan. Overall, Lincang's approach effectively balances cultural preservation, economic development, and tourism promotion through the strategic utilization of traditional festivals.

Fengqing County's Erdaohe Village: A Collective and Diversified Approach to Rural Tourism Development

Located at an altitude of 2,100 metres with an 80% forest coverage, Erdaohe Village in Fengqing County is a traditional village primarily inhabited by the Miao ethnic group. This community identified its tourism potential in 2019. Through collective decision-making involving all 47 households, the community conducted an inventory of local advantages, defined tourism products, and formulated development plans. Supported by financial backing from various Fengging County departments, Erdaohe invested in transportation infrastructure and public welfare facilities. The 47 households actively contributed idle land for tourist walkways and activity venues during construction, showcasing a shared commitment to the local development. Once tourism service facilities were completed, Erdaohe collaborated with specialized companies in breeding, entertainment, accommodations, culture, and catering, leveraging collective resources for rural tourism. Erdaohe encouraged local farmers to engage in business



Figure 5.27 Rural environment of Erdaohe village, Jingzhulin village, Fengshan Town, Fengqing County

activities aligned with their resources, skills, and aspirations. The formation of cooperatives for products like walnuts, tea, and ecofarming facilitated coordinated production, sales, and distribution, creating a diverse rural industrial system.

In 2022, Erdaohe welcomed 83,000 tourists, generating over 720,000 Chinese yuan in tourism revenue. This initiative not only resulted in an average per household income increase of over 8,000 Chinese yuan but also involved over 2,500 people from 600 neighbouring households in rural development. Erdaohe Village's inclusive and collaborative model serves as a successful case study for sustainable rural tourism growth.

SDG9 Industry Innovation, and Infrastructure

International community

The United Nations advocates that countries strengthen scientific and technological innovation and personnel training, promote Industry 4.0 and digital transformation, and encourage industrial upgrading and international cooperation. This can unleash economic vitality, enhance economic competitiveness, promote global industrialization and innovation, and achieve sustainable and inclusive economic development by 2030.

China

China continues to increase investment in infrastructure construction to further improve the accessibility, reliability and resilience of infrastructure. The nation promotes industrial transformation and upgrading for high-quality development, strengthens the integration of industrialization and IT application, and makes the industry more inclusive and sustainable. The country also optimizes the financing environment for small and medium-sized enterprises, improving the availability of financial services. It vigorously implements the innovation development strategy, constantly improving sustained innovation capabilities. China advances the Belt and Road Initiative (BRI), deepens international development cooperation, and provides support for other developing countries in infrastructure, industrialization and IT application.

Lincang

Lincang continues to promote the construction of modern infrastructure, with a focus on railways and highways. The city carries out industrial transformation and upgrading projects, adjusts the industrial structure, builds a modern industrial system, implements the strategy of innovation-driven development, capacity for industrial development and innovation.



Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation



The connectivity modern infrastructure network

In December 2017, the expressway achieved a breakthrough from scratch.

By June 2023.

468 kilometres of expressways had been built

Lincang has become the fourth city in Yunnan Province to have a comprehensive multi-dimensional transportation system of air, bullet trains, expressways and water transportation.

Traditional industries are transformed and upgraded, and the quality and efficiency of manufacturing is improved



Green energy industry



Building materials industry



Forest products processing industry



Brewing and beverage manufacturing industry



International cooperation on production capacity promotes industrial development

Construction of border economic cooperation zones 425 enterprises

from China and Myanmar have joined the initiative Market entities are growing in size



High-quality characteristic agricultural products industry



Trade logistics industry



Mining and electricity industry



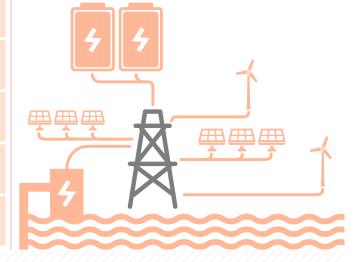
Textile mechanical and electrical industry



Ecological culture tourism industry

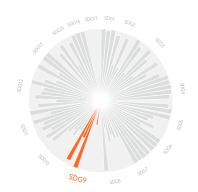
Accelerate the construction of green smart grid, energy Internet and "integrated of wind, solar, hydro and

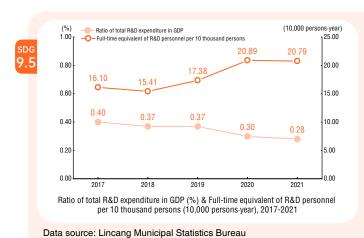
energy storage" base



^{*}Data on this page are statistics of 2022 unless otherwise noted.

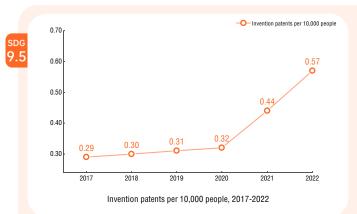
Lincang still has a lot of room for improvement in SDG9, with the assessment score increased from 28.81 in 2017 to 38.04 in 2022. In 2022, Lincang performed well in the mobile phone popularization rate and the popularization rate of household with fixed internet broadband access, scoring 100 points and 93.97 points respectively, but it still faces greater challenges in terms of indicators such as the proportion of output value of high-tech industries above designated size to total industrial output value above designated size and the invention patents per 10,000 people.





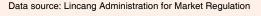
Lincang City pays attention to supporting local science and technology research and development, actively introduces talents through the implementation of the innovative talents (team) cultivation plan and the system of sending scitech experts to rural areas, and strives to increase the proportion of scientific research personnel.

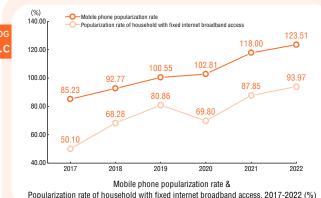
Data show that from 2017 to 2022, the ratio of total Research and Experimental Development (R&D) expenditure in GDP dropped from 0.40% to 0.28%; the full-time equivalent of Research and Experimental Development (R&D) personnel per 10 thousand persons increased slowly, from 16.10 man-year/10,000 persons in 2017 to 20.79 man-year/10,000 persons in 2022.



Lincang City has made efforts to increase the number of invention patents per 10,000 people by holding training courses on intellectual property rights, supporting the development of intellectual property intermediaries, and strengthening the maintenance of authorized invention patents and the protection of independent intellectual property rights.

Data show that from 2017 to 2022, the invention patents per 10,000 people in Lincang City increased from 0.29 to 0.57.





Data source: Lincang Industry and Information Technology Bureau

Lincang City takes advantage of the opportunity of the national government to accelerate the construction of new infrastructure and develop the digital economy, and constantly improves the intensity and coverage level of information and communication infrastructure construction, laying the foundation for digital development.

Data show that from 2017 to 2022, the mobile phone popularization rate in Lincang continued to rise, from 85.23% to 123.51%; the popularization rate of household with fixed internet broadband access increased significantly, from 50.1% to 93.97%.

"Dali - Lincang" Railway: A Significant Milestone for Lincang to be Integrated Into the National Railway and Highway Transportation Network

Historically lacking in robust transportation infrastructure, Lincang faced challenges hindering its social and economic development. To address the issue, the city issued the first comprehensive transportation development plan in 2017, envisioning a network encompassing aviation, railway, highway, waterway and related infrastructure. Taking into account local conditions, challenges, and environmental considerations, Lincang set ambitious goals and actively engaged with national and Yunnan provincial authorities, securing inclusion in key construction projects.

In December 2017, the completion of the highway to the city's airport marked the end of Lincang's zero-highway era. Subsequently, in December 2020, the Dali-Lincang railway was finalized, connecting Lincang City to Dali Bai Autonomous Prefecture. Lincang City is connected to the national high-speed rail network. This achievement not only ended Lincang's historical lack of railways but also fulfilled a century-long dream of the city's ethnic groups. The successful integration into national transportation networks is expected to facilitate enhanced connectivity, boost economic development, and unlock new opportunities for Lincang and its residents.





Figure 5.28 Inside and outside scenes of the Dali-Lincang Railway

Advancing High-quality and Sustainable Production Through Industrial Park Construction and Upgrading

Lincang City has undertaken comprehensive initiatives to drive science and technology innovation, catalysing local economic and societal development. A pivotal focus has been the active promotion of industrial park construction and upgrading through strategic measures, including specific plans, innovations incentives, talent development, infrastructure enhancement, and the establishment of service platforms.

In 2017, Lincang Industrial Park gained recognition as a provincial high-tech Industrial Development Zone (High-tech Zone), earning a place among Yunnan Province's prestigious "Billion Parks", indicating industrial parks with a total output value exceeding 1 billion Chinese yuan. Further accolades followed in 2022 when the park was acknowledged by the China National Intellectual Property Administration as a national pilot park for constructing a robust intellectual property system.



Figure 5.29 The technician is analysing experimental data in the Germanium Materials R&D Laboratory of the High-tech Zone

Over the years, the high-tech zone has transformed into an industrial system primarily focused on the new material industry, complemented by green food processing and the modern service sector.

As of the end of 2022, the Lincang high-tech zone hosted 3,823 market entities, 8 academician (expert) workstations, 1 national postdoctoral research station, and 1 national-level enterprise technology centre. With a total of 650 authorized patents accumulated, the zone's enterprises collectively achieved a main business income of 22.3 billion Chinese yuan, contributing to a total industrial output value of 15 billion Chinese yuan.

SDG10 Reduced Inequalities

International community

The 2030 Agenda aspires to eliminate global inequality and achieve sustainable and inclusive economic development by 2030. To achieve this objective, it is imperative to bolster social justice and the rule of law, promote inclusiveness and multiculturalism, and foster cooperation and exchange among countries.

China

China advocates for the coordinated development of urban and rural areas, striving for equity in education and employment, and ensuring people's equal participation and rights in development. The nation optimizes the distribution of national income, promotes the equalization of basic public services, and aims for the complete coverage of social security, progressively benefiting all people more equitably. China deepens practical cooperation with developing countries, advocating for equal rights, opportunities, and rules in international cooperation.

Lincang

Lincang remains dedicated to narrowing the gap between urban and rural areas, enhancing the employment public service system, and providing robust employment assistance for key groups such as college graduates, veterans, and migrant workers. The city incrementally raises minimum living allowances for urban and rural residents, as well as assistance and support standards for orphans and individuals in extreme poverty. The city explores the establishment of monitoring, early warning, and precise assistance mechanisms for poverty alleviation and those at risk of falling back into poverty due to illness. Lincang actively promotes the integration of health-focused poverty alleviation with rural revitalization.



Reduce inequality within and among countries



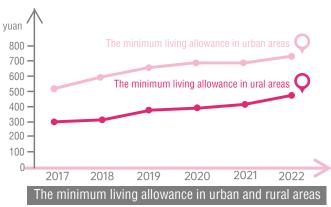
The income gap between urban and rural residents has narrowed, and the minimum living allowances in urban and rural areas have increased year by year

The urban and rural income ratio decreased

from **2.95:1** in 2012

to **2.30:1** in 2022





Equal access to basic public services and full coverage of social security system

Establishment of management mechanism of pairing urban schools with rural schools and high-quality schools with weak schools to promote the overall improvement of schoolrunning level and quality





Further the coordinated reform of medical care, medical insurance, and medicine, raise the level of intelligence of close-knit county medical and health communities, and build a high-quality and efficient medical and health service system

Ensure and promote the integration of vulnerable groups into society

Provide rehabilitation services to nearly 20,000 people with disabilities in need every year, with a rehabilitation service rate of 95.5% and an assistive device adaptation rate of **97.7%**



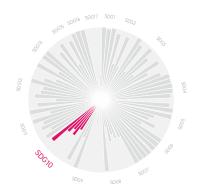


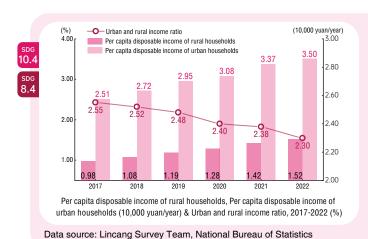


The "Sunshine Home" programme has provided home-based care services to 12,206 people with intellectual, mental and severe physical disabilities from 2018 to 2023

^{*}Data on this page are statistics of 2022 unless otherwise noted.

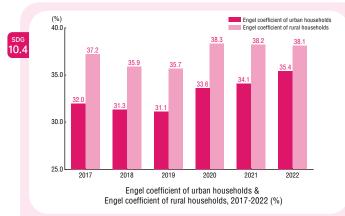
Lincang has made some progress in SDG10, with the overall assessment score increasing year by year from 51.09 points in 2017 to 63.12 points in 2022. Lincang performed well in per capita disposable income of urban and rural households, urban and rural income ratio and minimum living allowance in rural areas.





Lincang City has adjusted and improved the salary determination method and growth mechanism, improved the employment and entrepreneurship policies, optimized the allocation of human resources, ncreased income channels, and improved the income redistribution system. Through these ways, Lincang City has continuously improved income of urban and rural residents, and narrowed the income gap between urban and rural residents.

Data show that from 2017 to 2022, the per capita disposable income of rural households in lincang increased from 9,814 yuan/year to 15,194 yuan/year. The per capita disposable income of urban households increased from 25,056 yuan/year to 35,021 yuan/year. The urban and rural income ratio narrowed from 2.55 in 2017 to 2.30 in 2022.

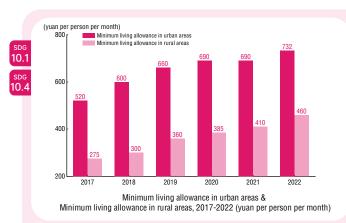


in lincang is similar, and the proportion of food, tobacco and alcohol consumption is still high.

The consumption structure of urban and rural households

The data show that compared with 2017, the Engel coefficient of urban and rural households in lincang increased in 2022, of which the Engel coefficient of urban households increased from 32.0% to 35.4%, and the Engel coefficient of rural households increased from 37.2% to 38.1%.

Data source: Lincang Survey Team, National Bureau of Statistics



Data source: Lincang Survey Team, National Bureau of Statistics

Lincang City has continuously improved the social assistance system by improving special assistance policies for medical care, education, housing, and employment, implementing different ways of assistance and provisions on fund disbursement for people with different difficulties, and implementing dynamic management of low-income populations. Lincang City in combination with the social and economic development, and constantly improve the minimum living allowance in urban and rural areas.

Data show that from 2017 to 2022, the minimum living allowance in urban areas in lincang increased from 520 yuan per person per month to 732 yuan per month. The minimum living allowance in rural areas increased from 275 yuan per person per month to 460 yuan per month.

Ensuring Equal Rights for All Ethnic Groups in Decision-making, Development and Access to Public Services

To enhance the participation of ethnic minorities in economic and social life, guarantee simultaneous improvements in the production and living conditions for all and foster prosperity in the border areas, Lincang City adheres to the principle of "leaving no ethnic group or area behind".

Efforts focus on infrastructure development, the cultivation of characteristic industries, livelihood protection, and enhancements to public services. Dedicated funds have been established to consistently support infrastructure construction and the improvement of living environments in ethnic minority areas. This includes backing for ethnic trade and the production of commodities tailored to the specific needs of ethnic minorities. Special planning policies have been implemented to support the development of all ethnic



Figure 5.30 Advocacy of policies supporting ethnic minority development

groups, particularly those with smaller populations. Demonstration projects for public service facilities and infrastructure have been initiated in ethnic minority rural communities to drive regional development. Additionally, ensuring the participation of ethnic minorities in decision-making processes at all levels of public affairs remains a priority. Ongoing training and selection processes are in place to cultivate ethnic minority civil servants across various government levels. By the end of 2020, 6 ethnic groups leapfrogged from the later stage of primitive society to socialism and 3 ethnic groups with small populations achieved historic milestones by collectively overcoming the challenge of absolute poverty, reflecting the city's commitment to the welfare of people from all ethnic backgrounds.

Ensuring Basic Public Services and Integration for Persons with Disabilities to Enhance Inclusivity in Lincang

Lincang City is committed to promoting the wellbeing and integration of persons with disabilities, constituting approximately 6.5% of the city's total population. A series of policies has been implemented to ensure their rights and improve their quality of life, covering areas such as the minimum subsistence allowance system, medical assistance, and subsidies for those facing difficulties. The proactive measures aim to improve employability and facilitate participation in social life for individuals with disabilities. Lincang has made significant progress in optimizing living conditions, especially for those with severe disabilities and in poverty. Initiatives include psychological counselling, rehabilitation services, skills training, and support for entrepreneurship and employment. The city has also promoted special education and disabled sports, contributing to a more inclusive society.

By the end of 2022, Lincang had established 2 service facilities for the disabled, 1 municipal sports training base, and 5 special schools. The goal of having special education schools in all counties (district) with a population exceeding 200,000 has been achieved. From 2016 to June 2023, living subsidies totalling 310 million Chinese yuan were issued, benefiting 28,000 eligible disabled individuals under the minimum subsistence allowances scope. From 2011 to June 2023, 3,533 households with severe disabilities received home modifications for enhanced accessibility.





Figure 5.31 Blind masseur Li Huacang demonstrates and explains massage techniques to visually impaired students

SDG11 Sustainable Cities and Communities

International community

The United Nations urges countries to attain sustainable and inclusive urban development by strengthening urban planning and management, improving the quality of housing and transport systems, fostering green and low-carbon urban development, promoting urban innovation and cultural diversity, and mitigating the environmental impact.

China

Governments at all levels in China persist in prioritizing people-cantered urbanization, advancing new urbanization, and enhancing urban and rural greening, and climate-resilient cities. In recent years, there has been a notable strengthening of the capacity to ensure people's access to housing and public services. The living environment has been significantly improved, transport hub cities boast increasingly comprehensive public transportation systems, and there has been enhanced ability to protect cultural heritage and disaster resilience. Per capita negative environmental impact has been further reduced, signifying substantial progress in the resilience and sustainable development of cities and towns.

Lincang

Lincang City actively promotes affordable housing, amplifies investment in urban infrastructure and public service facilities, systematically advances the construction of sponge cities, towns and villages throughout the region. The city intensifies the management of urban landscapes and architectural forms, maintaining the urban context and fostering a culture-enriched city. The city undertakes the "Thousands of Public Servants Plan Their Hometowns" project and results enhancement actions to guide and improve the sustainable development capacity of rural communities.



Make cities and human settlements inclusive, safe, resilient and sustainable



Accelerate the improvement of the housing support system, and continue to effectively improve the housing conditions of urban and rural residents



69,000 units of **public rental housing** were built, effectively solving the housing difficulties of more than 130,000 low- and middle-income people

The programme of **renovation of dilapidated rural homes** has ensured all 520,000 rural households have safe and affordable housing





31,000 households were rebuilt in rundown urban areas 27,000 households old urban residential communities renovated

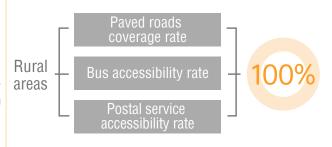
The capability of cities to resilience to disasters has been improved

Over 35% of areas under the sponge cities' construction requirements in built-up area



*Data on this page are statistics of 2022 unless otherwise noted.

Public transportation conditions in border areas have been significantly improved





Developing urban public space to improve the living environment

Green covered area as percentage of built-up area 36.47%

Harmless disposal rate of domestic waste 100%

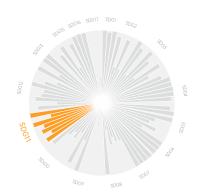
Area of public recreational green space per capita

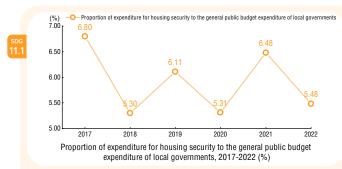
12.04m²

Proportion of days with good air quality 98.9%

The cultural heritage of ethnic minorities in border areas has been protected and inherited

20 China Ethnic Minority Villages, 786 representative inheritors and more than 1,000 intangible cultural heritage items contribute to transforming diverse cultural values Lincang performed well in SDG11, with its assessment score improving from 76.65 points in 2017 to 88.49 points in 2022. In 2022, the percentage of areas under the sponge cities' construction requirements in built-up area and the proportion of days with good air quality in urban area reached 100 points and 98.90 points respectively, and the score of area of public recreational green space per capita was 72.53 points.

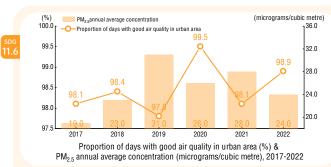




Data source: Lincang Municipal Statistics Bureau

Lincang City continues to promote the construction of affordable rental housing, regulate the operation and management of public rental housing, and promote the improvement of housing conditions for lower-middle-income households in urban areas. Through these ways, Lincang City continues to strengthen housing security to meet the basic housing needs of the masses.

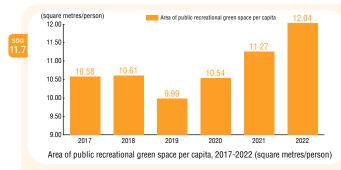
Data show that from 2017 to 2022, the proportion of expenditure for housing security to the general public budget expenditure of local governments remained stable at more than 5.30%.



Data source: Lincang Ecology and Environment Bureau

Lincang City continues to Improve the urban air quality by carrying out the ban on straw burning in the open air and the comprehensive treatment of pollutants such as dust, volatile organic compounds, catering fumes, industrial pollution sources, diesel trucks and other pollution sources.

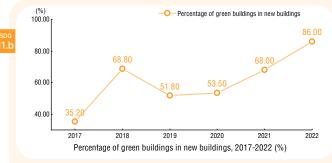
Data show that from 2017 to 2022, the proportion of days with good air quality in urban area in lineang remained stable at more than 97.8%, and the $PM_{2.5}$ annual average concentration were all below 31 micrograms/ cubic metre.



Data source: Lincang Housing and Urban-Rural Development Bureau

Lincang has continuously promoted the construction of public recreational green space by means of scientifc planning, balanced green space layout, and improving green space function types.

Data show that from 2017 to 2022, the area of public recreational green space per capita in lincang fluctuated from 10.58 square metres/person to 12.04 square metres/person.



Data source: Lincang Housing and Urban-Rural Development Bureau

Lincang City comprehensively promotes the green building construction by implementing the certification system of green building materials, strengthening the recycling and utilization of building materials, carrying out the construction of green building materials application demonstration projects, and developing prefabrication.

Data show that from 2017 to 2022, the percentage of green buildings in new buildings in lincang increased significantly year by year, from 35.2% to 86.0%.

Building Prosperous Villages to Enhance Lives and Livelihoods in Border Areas

Lincang City, sharing an approximately 300-kilometre border with Myanmar, encompasses 3 border counties (Zhenkang, Gengma and Cangyuan) along with 10 border townships, 44 administrative villages (communities), and 9 ethnic minorities residing across the border. While successfully eliminating absolute poverty in these areas by 2020, historical and geographical challenges have impeded overall development. In response, Lincang initiated the plan in 2019 to transform border villages into moderately prosperous villages, focusing on specific goals related to transportation, drinking water safety, public services, and characteristic industries. Infrastructure projects, including road improvements, power grid upgrades, water supply enhancements, and communication facilities improvements, have been undertaken.



Figure 5.32 Bee farm in Banhong Village, Banhong Township, Cangyuan Autonomous County

Additional efforts include a renovating dilapidated houses and implementing greening, beautification, and lighting projects to enhance village aesthetics. Continuous enhancements to basic public services, such as education and medical care, have also been prioritized. Lincang actively encourages the development of agricultural products and rural tourism, emphasizing local agriculture and ethnic culture. Economic wellbeing is further promoted through skills training initiatives such as modern farmers and modern entrepreneurs.

By the end of 2022, these policies and construction projects have successfully achieved infrastructure indicators in all 44 border communities. The per capita disposable income of border residents has risen more than 15 percentage points above the county average.

"Thousands of Public Servants Plan Their Hometowns" Initiative to Empower Rural Planning

Lincang City, characterized by numerous mountainous areas and remote rural locations, confronted challenges such as a declining labour force, inadequate public services, and deteriorating infrastructure, largely attributed to the lack effective village planning. In response, Lincang launched the "Thousands of public servants plan their hometowns" initiative in December 2018, urging public servants born or raised in Lincang's rural areas to return and actively contribute to planning natural communities beyond the confines of urban and township frameworks.

The initiative unfolded through a dual approach: proactive outreach by out-of-town officials to their local communities and concurrent community engagement efforts. Village planning groups were formed, entrusted with conducting field research



Figure 5.33 The planning group of Mingwangshi Natural Village, Dongshan Village, Fengshan Town, Fengqing County, is discussing the development plan with the local residents

and communication to produce easily understandable planning maps, specifications, project statistics and village regulations. The planning outcomes, endorsed by local residents, were submitted to the superior planning department, ensuring a grassroots-driven planning process. Lincang facilitated this process by providing basic data, work manuals, training sessions, and technical guidance from planning and design units.

By June 2019, 26,400 public servants had returned to contribute to the planning of all 6,511 natural villages. Following this, a results improvement action was initiated in July 2021, resulting in 913 out of 952 administrative villages (communities) completing their review and approval by May 2023.

■ Lincang's Urban and Rural Greening Initiative to Foster Eco-friendly Public Spaces

To promote the coordinated development of urban and rural construction and prioritize ecological conservation, Lincang City has outlined a comprehensive plan for greening and beautification. Tailoring its approach to the unique local culture, geography, ecology and economy, the city and its 8 counties (districts) have distinct green and beautiful positioning.

Lincang is envisioned as "Beautiful and Enchanting Lincang", while the counties (districts) adopt specific themes such as Linxiang's garden-like ambiance, Yun County's green energy, Fengqing's association with Yunnan black tea, Yongde with fruit fragrance, sweet Gengma, Shuangjiang with tea fragrance, beautiful border town Zhenkang, and Cangyuan with secret scenery. The strategic vision extends to a 10-year plan and a 3-year action plan crafted in 2022, covering key areas including towns, communities, villages, transportation, rivers and lakes, campuses, industrial parks and tourist attractions.

Lincang further enhanced its efforts through capacity building, project construction promotion, establishment of demonstration sites, development of nursery bases, and creation of channels for seedling and flower donations. As of August 2023, the green covered area as percentage of built-up area has reached 36.47%, with 12.04 square metres of public recreational green space per capita. By the end of 2021, the city achieved a green coverage rate of 40%, along with an 85% coverage rate for park green space within service radii.



Figure 5.34 Yulong Lake in Linxiang District

Enhancing Governance and Services Through Intelligent Solutions in Yulong Community, Linxiang District

Situated in Linxiang District, Yulong Garden affordable housing community confront challenges of a substantial population, frequent transient residency, and limited community resources, totalling 8,092 housing units and nearly 20,000 residents. In a proactive move to address these issues and optimize community services, Yulong Community collaborated with Linxiang District's social security and security service departments, alongside industry organisations.

This joint effort aimed to analyse governance requirements and streamline workflows across public services, property management, and business services. By applying information technology, the community improved its security infrastructure. Collaborations with network operators, well-known Internet enterprises, local technology firms, and educational institutions facilitated research, development and the implementation of innovative information technology solutions.



Figure 5.35 The smart security module of Yulong "Smart Community" data centre

Through the connection, cleaning and integration of diverse databases, the Yulong "Smart Community" data centre emerged as a central hub. This hub integrates modules such as resident information management, smart governance, security, and elderly care services. The system's capabilities span from automatically identifying illegal parking, triggering alerts for high-rise littering, offering early warnings for controlled personnel, and facilitating streamlined command and dispatch for various

events. Furthermore, the integration of online service providers, covering property management, dining, elderly care, childcare, housekeeping, medical services, employment, and shopping, empowers residents' access to essential service through mobile applications. This holistic approach not only enhances the governance capacity of Yulong community but has also significantly improves the overall service levels, embodying intelligence and convenience in residents' daily lives.

■ Preserving and Reviving Zhenkang County's Cultural Heritage "Ashuse"

Zhenkang County, nestled in Lincang City and home to 23 ethnic groups, has a rich and diverse cultural traditions. Among these, "Ashuse" stands out as a unique form of "folk song singing", embodying the fusion of minority and Central Plains cultures. Popular among ethnic communities such as Han, Yi, Lisu and other ethnic groups in Zhenkang, this art form, characterized by its extensive history and integrated singing and dancing music, serves as a representative element of the region's traditional folk culture. Additionally, "Ashuse" plays a role in fostering cross-border friendships between the people of China and Myanmar, reaching beyond Lincang to areas like Kokang in Myanmar and Tangwo in Thailand.

Despite its widespread popularity, the inheritance of "Ashuse" faced challenges due to the evolving cultural landscape. To address this, Zhenkang County took proactive measures, establishing the "Ashuse" project protection working group. Zhenkang formulated a practical plan for the inheritance and protection of "Ashuse", organising training activities cantered around proficient "Ashuse" inheritors. This initiative sparked a local craze, with an increasing number of people eager to learn and sing "Ashuse." Zhenkang also bolstered the creation and support of folk "Ashuse" song teams. The aim was to mobilize a broader community to join the cause of inheritance and protection, fostering a positive social atmosphere for such activities and reversing the trend of "Ashuse" fading into obscurity.

In a strategic move in 2008, Zhenkang County secured the registration of the cultural trademark logo of "Ashuse", gradually establishing it as an emblematic symbol of the county. These initiatives cultivated cultural tourism products, unlocking the social and economic potential of cultural initiatives. In 2021, "Ashuse" was successfully selected into the list of representative projects of national intangible cultural heritage, and Zhenkang County was selected by the Ministry of Culture and Tourism as the "Town of Chinese Folk Culture and Art" for the period of 2021-2023.



Figure 5.36 Zhenkang (China) - Kokang (Myanmar) "Ashuse" folk song competition, August 20, 2023



Figure 5.37 Zhenkang County "Ashuse" singing team activity

SDG12

Responsible Consumption and Production

International community

The United Nations advocates for innovation, education, and policies to steer responsible consumption and production, minimize resource waste and environmental impact, foster the development of a circular economy, and enhance the quality of life for all.

China

With the objectives of carbon peaking and carbon neutrality, China is committed to promote a comprehensive green transformation of economic and social development, striving for a modernized society featuring harmonious coexistence between humanity and nature. China has adopted a more proactive stance in engaging in international cooperation on green development and has promoted the establishment of a global environmental governance system marked by fair, reasonable and mutually beneficial cooperation.

Lincang

Lincang actively promotes green technology and circular economy development. The city is implementing industrial transformation and upgrading projects, regulating the overall utilization of resources and energy, optimizing energy structure, promoting industrial energy conservation and emission reduction, advocating for cleaner production, phasing out outdated production capacity, and expanding green energy consumption. The city raises awareness of ecological conservation, advocates green living, and tailors various sustainable consumption and production models to local needs.



Ensure sustainable consumption and production patterns



The efficiency of resource and energy development and utilization has been greatly improved

Deeply implement industrial energy saving and emission reduction, vigorously promote clean production, and accelerate the elimination of outdated industrial capacity

From 2017 to 2022, carbon dioxide emission per 10,000 yuan of GDP dropped by 33.6% and water consumption per 10,000 yuan of GDP dropped by 56.6%



Innovating the sustainable production modes of advantageous and characteristic industries



Green development model of circular economy of cane sugar whole industry chain



Agglomeration development model of walnut whole industry chain



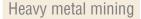
Eco-economic model of combination of agriculture and photovoltaic industry & forestry and medicinal industry

Other sustainable development models

Strict environmental management of solid waste and hazardous waste

Focusing on investigation and rectification







Heavy metal residue waste



Tailings pond



Industrial solid waste storage sites

Carrying out extensive activities to popularize sustainable production and lifestyle



Thematic lectures and training



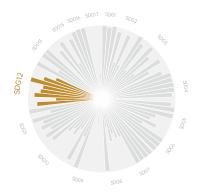
Typical case publicity

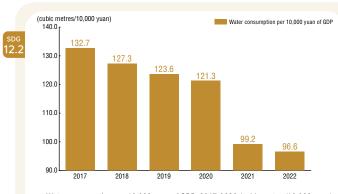


Innovative enterprise recognition

^{*}Data on this page are statistics of 2022 unless otherwise noted.

Lincang performed well in SDG12, with an overall score of more than 80 points from 2017 to 2020. In 2022, the overall score of SDG12 was 82.32 points. The assessment scores of pesticide consumption and procurement scale of energy-saving and environmental-friendly products as a proportion of the procurement scale of similar products were 100 and 91.68 respectively; the rate of domestic garbage harmless treatment in rural area got 62.29 points.



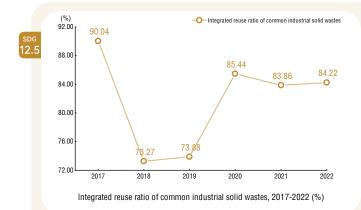


Water consumption per 10,000 yuan of GDP, 2017-2022 (cubic metres/10,000 yuan)

Data source: Lincang Municipal Water Affairs Bureau

Lincang City has clarifed the upper limit of water resources development and utilization, and implemented strict water intake permit and paid use system of water resources, water intake monitoring and measurement, and water consumption statistics and management measures. Through these measures, Lincang has rationally determined the dual control indicators of total water consumption and consumption intensity of each county (district), strengthened the unified management of water resources, and promoted the intensive, economical and safe use of water resources.

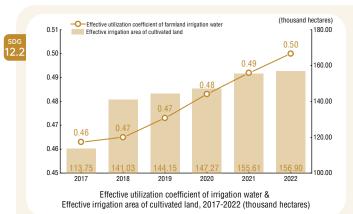
Data show that from 2017 to 2022, water consumption per 10,000 yuan of GDP in Lincang City dropped significantly, from 132.7 m³ in 2017 to 96.6 m³ in 2022.



Data source: Lincang Industry and Information Technology Bureau

Lincang City continues to improve the integrated reuse of industrial solid wastes by carrying out environmental investigation and rectification of key industries and enterprises, tailings ponds and industrial solid waste storage sites, as well as soil pollution investigation in key areas.

Data show that from 2017 to 2022, the integrated reuse ratio of common industrial solid wastes in Lincang City declined, and the index remained stable at more than 83% after 2020.



Lincang City has formulated the water supply balance analysis and water supply security program, carried out efficient water-saving irrigation and water and fertilizer effcient utilization projects and other measures, which effectively guaranteed the water demand of agricultural production.

The data show that from 2017 to 2022, the annual effective irrigation area of cultivated land in Lincang increased continuously, from 113.75 thousand hectares to 156.90 thousand hectares. The effective utilization coefficient of irrigation water increased year by year from 0.46 to 0.50.

Data source: Lincang Municipal Water Affairs Bureau, Lincang Municipal Statistical Bulletin of National Economic and Social Development from 2017 to 2022

Advancing Construction Waste Utilization: Green Materials Industry in Lincang

In a strategic initiative to promote the circular economy and environmental sustainability, Lincang High-tech Zone launched an investment promotion drive in 2021, introducing a new environmentally friendly material production enterprise. The primary focus is on effectively utilize construction waste as a valuable resource for the production of eco-friendly building materials.

This innovative enterprise specializes in the comprehensive utilization of construction demolition waste, tailings waste and other bulk solid waste, crafting a diverse range of environmentally conscious products such as imitation stone plates, gas brick, multifunctional brick, and dry powder mortar. A notable environmental benefit is evident, with each ton of construction waste utilized leading to a reduction of 3.7 kg of carbon dioxide emissions. The enterprise's strategic vision includes the establishment of four fully automated production lines. Once operational, these lines are anticipated to process the entirety of construction waste within Lincang's jurisdiction, contributing to an impressive annual output value of 700 million Chinese yuan.



Figure 5.38 Product of construction waste resource utilization by the new green environmental protection material production enterprise

Advancing Sugarcane Industry in Gengma Autonomous County: A Sustainable Cradle to Cradle Approach

Gengma Dai and Va Autonomous County (Gengma Autonomous County), a crucial contributor to the national sugar production and protection zone, is deeply entrenched in sugarcane cultivation and sugar production. With an extensive sugarcane planting area covering 410,000 mu (27333.33 hectare) and sugarcane farmers constituting 57% of the agricultural population, the sugar industry plays a significant role in the county's economy. To unlock the sector's full potential, Gengma Autonomous County prioritized enhancing the quality and scale of its existing product industry.

Emphasizing enterprise clustering and technological research and development, the county initiated the transformation of its sugarcane industry in 2019, leading to the upgrade and constructing of green food industrial parks. This strategic move catalysed the dynamic development of upstream and downstream sugar products and associated industries, fostering collaboration among enterprises engaged in intensive sugar product processing and comprehensive leftover utilization. Three distinct industrial chains were established, encompassing processes from "sugar production from sugarcane - bagasse - papermaking - degradable tableware" to "sugar production from sugarcane - alcohol - alcohol waste mash - bio-organic fertilizer" and "sugar production from sugarcane - solid waste - bio-organic fertilizer". This comprehensive approach has resulted in the production of diverse products such as white sugar, alcohol, cane tipping feed, solid organic fertilizer, liquid organic fertilizer, bagasse, pulp, household paper and more, forming a circular economy industry chain.

In 2022, the sugarcane income in the county reached 910 million Chinese yuan, and the comprehensive output value of the entire sugar industry chain surged to 8.6 billion Chinese yuan. Gengma Autonomous County now ranks the fifth among China's sugar-producing counties (cities and districts) and leads the sugarcane industry in Yunnan Province. Notably, its comprehensive utilization rate stands as the highest in the country.





Figure 5.39 Production workshop of comprehensive utilization products of sugarcane residues

SDG13 Climate Action

International community

The United Nations calls on all countries to provide effective support for mitigating climate change and emergency management through education, promotion, and strengthening international cooperation. This effort aims to ensure that the global temperature rise is controlled within an acceptable range, reduce the negative impacts of climate change on humanity and the planet, and ensure that vulnerable groups are not excessively affected by climate change.

China

China has always attached great importance to its response to climate change. It has formulated the *National Strategy for Climate Change Adaptation 2035*. By accelerating policy implementation, intensifying basic research, the proportion of non-fossil energy in china's total energy consumption continuously increased, and the national carbon emissions trading market pilot projects have accumulated valuable experience. China is continually reinforcing ability to adapt to climate change.

Lincang

Lincang City has enhanced urban climate resilience by intensifying climate risk assessments, promoting integrated protection of mountains, waters, forests, fields, lakes, grasses, and deserts, and promoting the building of sponge cities. At the same time, lincang has actively carried out education and publicity on climate change mitigation and environmental protection, and encouraged public participation in climate actions.

Taking urgent action to combat climate change and its effects



Integrate climate change measures into local development planning

Integrate the specific requirements of "responding to climate change, promoting green production modes, promoting green and low-carbon development, peaking carbon emissions and achieving carbon neutrality" into

Territorial and Spatial Planning of Lincang City, Yunnan Province (2021-2035)

8

The Outline of the 14th Five-Year Plan (2021-2025) for National Economic and Social Development and the Long-Range Objectives Through the Year 2035 of Lincang

Spread knowledge aboutclimate change and disasterprevention and reduction

From 2020 to 2022, have played **publicity audios and videos** on climate change and disaster prevention, reduction and relief reached 3,000+ items/times



More than 450,000 copies of various publicity materials have been distributed, benefiting nearly 200,000 people

More than 150 disaster prevention, mitigation and relief exercises have been organised, with more than 50,000 participants



Strengthen mechanisms and capabilities to effectively combat climate change risks

Actively development

National Comprehensive Disaster-Reduction

Demonstration Communities



Disaster prevention and reduction working system development



Construction of disaster reduction facilities and shelters



Emergency response planning and drills

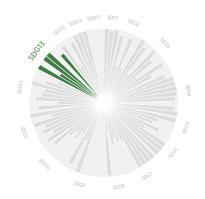


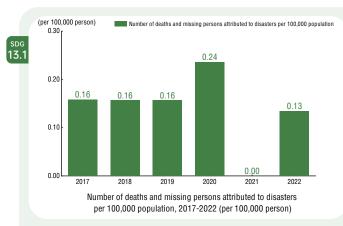
Disaster reduction publicity and educational activities

Scan the QR code to watch the promotional video related to judicial guarantees for ecological and environmental governance.

^{*}Data on this page are statistics of 2022 unless otherwise noted.

Lincang City has performed relatively well in terms of SDG13, and the assessment score increased from 64.40 in 2017 to 78.84 in 2022. From 2017 to 2021, Lincang consistently scored 100 points in the coverage of education and publicity activities on climate change for primary and secondary school students and the share of non-fossil fuels in primary energy consumption.

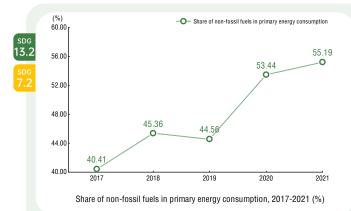




Data Source: Lincang Municipal Emergency Management Bureau.

Lincang City has been strengthening the capacity to prevent and mitigate natural disasters by establishing various emergency response plans, strengthening infrastructure construction and emergency rescure team training, and perfecting the natural disaster prevention, mitigation, and relief system, and rapidly advance the city's efforts in disaster prevention, reduction, and relief.

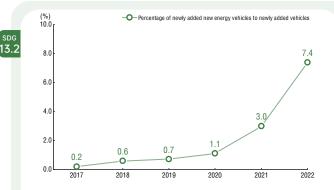
The data indicate that from 2017 to 2022, the number of deaths and missing persons attributed to disasters per 100,000 population in lincang decreased from 0.16 to 0.13.



Data Source: Lincang City Development and Reform Commission.

Taking advantage of its abundant local natural resources, lincang has been actively promoting solar and wind energy projects based on its existing hydropower foundation. This has continually increased the share of non-fossil energy to primary energy consumption, supporting the development of innovative industries mainly based on green energy consumption.

The data from 2017 to 2021 show that the share of nonfossil energy in primary energy consumption in lincang has continuously increased from 40.41% to 55.19%.



Percentage of newly added new energy vehicles to newly added vehicles, 2017-2022 (%)

Data Source: Lincang Municipal Development and Reform Commission.

Lincang city is striving to increase the proportion of new energy vehicles by the promotion of using new energy vehicles through ramping up the construction of supporting infrastructure such as electric vehicle charging piles and stations, offering favourable policies like vehicle purchase tax reduction incentives, and encouraging sectors like taxis (including ride-sharing and traditional taxis), tourist buses, scenic spot vehicles, and urban logistics to adopt new energy vehicles.

The data reveal that from 2017 to 2022, the percentage of newly added new energy vehicles to newly added vehicles in lineang surged from 0.2% to 7.4%.

Advancing Environmental Protection and Climate Action: Lincang City's National Ecological Conservation Demonstration Zone Construction

In a proactive stance towards environmental protection and climate change, Lincang City has diligently worked to enhance ecological progress. While actively constructing the national innovative demonstration zone for sustainable development, Lincang has established a robust natural resource protection management and environmental supervision system. Prioritizing the safeguarding riverbanks, biodiversity, and the execution of ecological restoration projects, the city has embraced territorial spatial planning. Action plans for carbon peaking and carbon neutrality, along with initiatives such as habitat improvement and the promotion of green, low-carbon lifestyles, collectively optimize ecological space, ensuring environmental security.

Lincang City extends its commitment to featured agricultural products like sugarcane, walnuts, nuts, and tea. Actively building a plateau characteristic agricultural industry system,



Figure 5.40 Urban landscape of Linxiang District, Lincang City

the city also promotes renewable energy projects, including hydropower, wind, and solar power initiatives. This commitment contributes to the development of a green industrial system, improving the quality of life and attaining notable achievements in regional ecological quality and green socio-economic development.

In 2020, Lincang City initiated the declaration and establishment of a National Ecological Conservation Demonstration Zone. Governed by a dedicated leading group, the city finalized the *Lincang City National Ecological Conservation Demonstration City Plan (2021-2035)*. Recognizing these achievements, the National Ministry of Ecology and Environment conferred the title of National Ecological Conservation Demonstration Zone upon Lincang City in 2022.

Coordinated Development of Green Energies for Enhanced Production Structure

Lincang City, renowned for its abundance of green energy resources, stands as a pioneer in Yunnan Province for renewable energy development, including hydroelectric wind, solar, biomass, and geothermal energy. The city strategically harnesses these resources to shape a greener and more resilient future. In a proactive response to climate change, Lincang has implemented measures to maximize its wind and solar energy potential. This commitment is manifested through 8 key work directions, involving the construction of small and medium-sized hydropower plants, the development of solar power, power grid interconnection, establishment of the hydropower silicon material industry system, construction of natural gas infrastructure, expansion of the power consumption market, power system reform, and the enhancement of water resource management efficiency.

Leveraging the capabilities of large and medium-sized hydropower plants and the distribution system, Lincang supports the growth of solar and wind power projects. The efforts optimize the overall energy structure, upgrade rural power grids and urban distribution networks, and also include the construction of the China-Myanmar natural gas pipeline branch in Lincang. Consequently, these initiatives foster the harmonious development of hydropower, wind, solar, and other green energies, establishing a dominant pattern of clean electricity. As of June 2023, Lincang City achieved a green energy installed capacity of 98.28%, surpassing both provincial and national levels.





Figure 5.41 Hydroelectric and photovoltaic power infrastructure

SDG15 Life on Land

International community

The United Nations calls on all countries to protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

China

China attaches great importance to eco-environmental conservation and protection. China has coordinate the management of mountains, rivers, forests, farmlands, lakes, grasslands, and deserts, and has carried out large-scale afforestation projects, so the quality and stability of its ecosystems continue to improve, and biodiversity is effectively protected. At the same time, China actively participated in global environmental governance, collaborating with other countries to build a global eco-civilization. and promote solutions for world environmental protection and sustainable development.

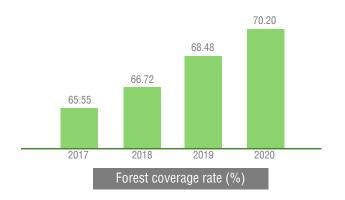
Lincang

Lincang, with ecological protection as a premise, strengthens the sustainable management of forest resources, combats desertification, restores degraded land, and promotes the restoration and maintenance of ecosystems. Lincang enhances the protection of wild fora and fauna resources, protects endangered species and their habitats, and promotes the restoration and increase of biodiversity. Meanwhile, by reasonable land use planning, Lincang reduces negative impacts on ecosystems, promotes sustainable land use, and halts and reverses land degradation.

Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss







Conservation of biodiversity through the establishment of nature reserves

2 national, 2 provincial, and 1 county-level nature reserves have been established, witch protecting the city's unique original ecosystem and over 90% of wild flora and fauna species.

Delineate ecosystem protection red lines and environmental control units

Formulate and execute The Lincang City's "Three Lines One Permit" Ecoenvironmental Zoning Control Implementation Plan.

Delineate 6,046.48 square kilometres **ecosystem protection red lines area**, accounting for approximately **25.6%** of the city's total land area.

Divided 70 environmental control units of various types and **formulated targeted control requirements**.

River and lake ecosystems have been restored and managed

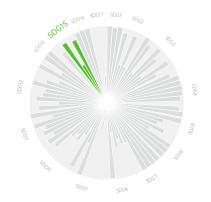
Efforts have been intensified in the Lancang River basin, Nu River basin, and Nanting River basin to implement integrated management of mountains, waters, forests, farmlands, lakes, and grasslands. Promote the task of "return, reduction, adjustment, treatment, and management" of ecosystem protection and restoration. Control soil erosion over an area of 3.194.51 km².

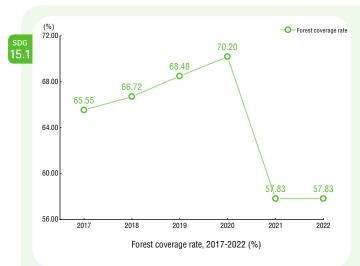


^{*}Data on this page are statistics of 2022 unless otherwise noted.

You can scan the QR code to watch videos related to biodiversity protection.

Lincang City has a notable performance in SDG15. From 2017 to 2020, the overall assessment score has consistently remained above 80 points. In 2022, the overall assessment score for SDG15 was 82.31 points, with scores for forest coverage rate and ecological quality index (EQI) reaching 94.85 points and 94.42 points respectively.

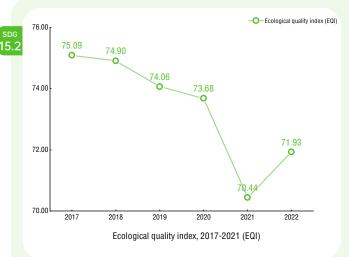




Data source: Lincang Municipal Forestry and Grassland Administration

Lincang City has established a rigorous forest resource protection and management system, focusing on areas such as natural forest protection and restoration, forest management, public welfare forest management, reserve forest construction, and the coordination mechanism for forest inspection and law enforcement. This has propelled local governments to take on the primary responsibility for forest resource protection, effectively ensuring the ecological quality and functionality of the forests.

The data indicate that from 2017 to 2020, the forest coverage rate of lincang has steadily rising from 65.55% to 70.20%¹.



Data source: Lincang Ecology and Environment Bureau

Lincang City continues to promote air pollution control and undertakes comprehensive water pollution treatment, ensuring the quality of ecological environment remains good.

The data reveal that from 2017 to 2020, the ecological quality index of lineang were consistently above 70. In 2021, the ecological quality index experienced a slight decline, registering at 70.44.

¹ In 2021, the results of national forest resource management were integrated with the outcomes of the Third National Land Survey. This led to a change in the criteria for classifying the land types included in forest coverage statistics, making it not comparable to preceding data.

Advancing Global Forest Goals: Shuangjiang Autonomous County's Practice for Coordinated Forest Conservation and Socio-economic Development

Shuangjiang Lahuzu, Va, Blang, and Dai Autonomous County (Shuangjiang Autonomous County) is situated at the confluence of the Lancang River and Xiaohei River, boasting a forest coverage rate of 60.02%. In 2019, the National Forestry and Grassland Administration of PRC acknowledged it as Yunnan's first demonstration site for implementing the *United Nations Forest Instrument*. In its pursuit of development, Shuangjiang Autonomous County diligently follows the 6 global forest goals outlined in the *United Nations Strategic Plan for Forests (2017–2030)*. It actively explores sustainable forest management practices to foster multi-ethnic coordinated development.

Through ecological forestry projects such as land greening, forest cultivation, closed afforestation, and low-yield forest transformation, the county focuses on strengthening the protection of vital ecosystems like ecological forest belts, nature reserves, and ancient tea mountain national forest parks. These efforts effectively contribute to natural ecological restoration. Lincang enacted local regulations



Figure 5.42 Ancient tea tree and its identification label

safeguarding ancient tea trees, preserving endangered species, and renowned ancient trees, ensuring the maintenance of biodiversity. Relying on the development of four pilot sites (including ancient tea tree resource protection, Lincang macadamia nut plantation, Dalang Dam planted forest, and Oolong tea garden) Shuangjiang Autonomous County has cultivated a thriving forestry industry chain. This encompasses composite production planting, innovative technology promotion, product processing, and marketing, driving the joint development of featured agricultural products and cultural tourism industries.

The initiative has successfully addressed local employment and poverty alleviation, achieving the coordinated development of forest conservation and socio-economic progress. By the end of 2022, Shuangjiang Autonomous County had cumulatively established forestry industry areas covering 1.3202 million mu (88013.33 hectare) with a total forestry output value of 4.003 billion Chinese yuan.



Figure 5.43 The macadamia nut plantation

Construction of Nangun River National Nature Reserve to Improve the Habitat Environment for Asian Elephants

Lincang City, a primary distribution area for Asian elephants in China, has taken a significant step in safeguarding their habitat by establishing the Nangun River Nature Reserve in 1980. Officially recognised as a national nature reserve in 1995, this reserve is crucial for studying and preserving the India-Northern Myanmar population (β population), representing the only β population of Asian elephants in China.

Dedicated to the protection of Asian elephants, the Nangun River Nature Reserve has carried out extensive habitat restoration and conservation efforts. Between 1982 and 2003, 87 households with 483 residents from 2 villages were voluntarily relocated from the reserve, restoring their living areas back to nature and markedly enhancing the habitat for Asian elephants. In addition, the reserve established 800 mu (53.33 hectare) of food source bases for elephants and removed 233 mu (15.53 hectare) of invasive species.

In daily management, the Nangun River Nature Reserve

employs rigorous measures such as strengthened care routines, heightened awareness campaigns for wild flora and fauna protection, installation of remote monitoring systems and warning signs, and collaborative efforts with various departments to combat crimes against wildlife resources. Clear ecological conservation redlines and development boundaries guide the reserve's actions.

Moreover, the Nangun River Nature Reserve actively collaborates with domestic and international research institutions to devise scientific strategies for Asian elephants protection and mitigating human-elephant conflicts, fostering a harmonious coexistence between humans and nature. In a significant development, Yunnan Province initiated the establishment of the Asian Elephant National Park in 2021, incorporating the Nangun River National Nature Reserve, the Cangyuan Va Mountain Provincial Scenic Area, and the Cangyuan Nangun River Unique Fish Provincial Aquatic Germplasm Resource Protection Area into the national park.



Figure 5.44 The Asian elephant population in Nangun River Basin is slowly recovering

Systematic Protection, Restoration, and Sustainable Utilization of the Lancang River Basin's Ecosystem and Its Service Functions

Lincang City, named for its proximity to the Lancang River, is intricately linked to this vital waterway. Stretching 306.63km from the northern to southern borders, coursing through Fengqing County, Yun County, Linxiang District, and Shuangjiang Autonomous County, the Lancang River encompasses a substantial 51.47% of Lincang City's land area. This region, endowed with rich natural and cultural resources, presents considerable opportunities for both conservation and development.

In a strategic move to safeguard the ecological environment of the Lincang section of the river and unlock new economic prospects, the city has fully implemented the River Chief System. Under this system, key government officials are responsible for water resource protection, shoreline management, water pollution prevention, water environment management, and overall conservation efforts. The city's management initiatives span five key areas: ecological environment protection of the river basin, development of leading industries, construction of characteristic villages and towns, infrastructure development, and the creation of platforms for economic development.

Moreover, collaborative efforts with hydropower stations in the Lincang section, reservoir areas, and upstream and downstream prefecture-level cities ensure the comprehensive management of different regions. This collaborative approach aims to the safeguard the Lancang River's water quality and biodiversity within the basin. Notably, from 2016 to 2022, the surface water quality of the Lancang River system consistently received an excellent rating. In August 2023, intermediate people's courts from Lincang City, Pu'er City, and Xishuangbanna Dai Autonomous Prefecture signed a cooperation agreement, establishing a new platform to promote judicial protection across the Lancang River Basin.





Figure 5.45 Lancang River Basin in Lincang territory

Strict Enforcement of Biodiversity Monitoring and Conservation Regulations to Preserve Unique Primordial Ecosystems

Situated at the convergence of the Tropic of Cancer and the geographic watershed between the Pacific and Indian Oceans, Lincang City holds a pivotal position within China's primary geographical units and diverse flora and fauna regions. Serving as a transitional zone, the city's ecosystems are abundant and unique, hosting a variety of wild flora and fauna, including species with ancient origin and distinctive evolutionary development. Functioning as both the origin and dispersion ground for numerous significant species, Lincang stands as a microcosm of Yunnan's rich biological diversity, ranking among China's regions with the most valuable biological resources. Globally, it is recognised as a key biodiversity conservation area in Southwest Yunnan, holding significance as a vital biodiversity hotspot and gene bank.

In a committed effort to preserve biodiversity and enhance the ecological environment, Lincang has implemented a comprehensive set of biodiversity policies and regulations.

Figure 5.46 Staff from the Nangun River National Nature Reserve Management and Conservation Bureau presenting plant specimens within the reserve

The pivotal role of municipal coordination committees for ecological environmental protection and biodiversity conservation is evident in overseeing conservation management efforts. Lincang rigorously enforces systems such as environmental impact assessment, ecological damage compensation, and ecological protection compensation. The city has conducted specialized surveys focusing on rare species such as the Asian elephant, biodiversity system assessments, and monitoring reports. Public awareness campaigns have been organised to elevate societal consciousness about biodiversity conservation.

By the end of 2022, Lincang has successfully established 5 nature reserves and 3 forest parks at various levels, including 2 national-level nature reserves and 2 national-level forest parks. These efforts have proven effective in safeguarding the city's unique original ecosystems, ensuring the protection of over 90% of its wild flora and fauna.

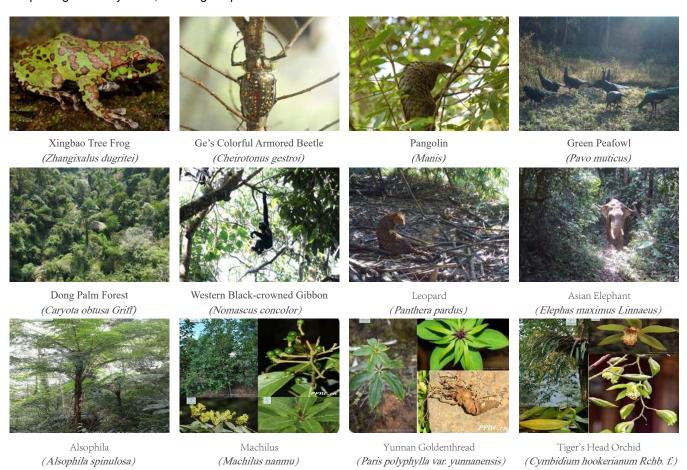


Figure 5.47 Wildlife species in Lincang City

SDG16 Peace, Justice, and Strong Institutions

International community

The United Nations advocates ensuring equal access to justice for all by 2030. This involves strengthening the rule of law at the national and international levels, reducing violence and corruption, ensuring effective management of public resources, and promoting government transparency and accountability. It emphasizes the importance of effective governance systems for sustainable development and the interrelated nature of social, political, and economic stability.

China

China aims to let the public feel fairness and justice in every judicial case. To achieve this, China enforces the law strictly against all types of crimes, works to prevent and combat domestic violence and human traffcking, enhances legal aid services, and continuously make efforts to enhance clean governance and anti-corruption work in china's government agencies. Furthermore, China is committed to rule by law and deepening international cooperation in law enforcement and security.

Lincang

Lincang city has made concerted efforts to design various regulations and mechanisms to protect the rights of vulnerable groups. Through technological solutions, the city aims to reduce the public's judicial costs, intensify crackdowns on crimes like drug traffcking and violence in border areas. Lincang city actively carries out legal publicity and education to improve the public's legal literacy, and creates a fair, just and harmonious social environment.



Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable, and inclusive institutions at all levels



Combat any criminal activities that endanger the safety of people



Between 2012 and 2021,

Lincang has destroyed 543 **cross-border criminal gangs**, handled 12,998 **drug-related criminal cases**,

and seized 53.34 tons of drugs.

Make sure that everyone are protected by law

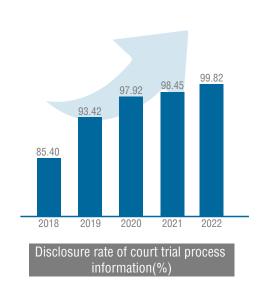
Lincang Intermediate People's Court has implemented the litigation service full-coverage model

of "central court-township - key village".

A total of 91 circular case handling stations and litigation service stations have been set up, and a grassroots judicial service network has been further organised to facilitate the front-end resolution of conflicts and disputes.



Further strengthen Judicial transparency



"Lincang without litigation" digital platform support the public enjoys convenient legal services

By leveraging **online methods**, 24,425 dispute cases were resolved with an average mediation duration of 9.76 days.

As of June 2023.

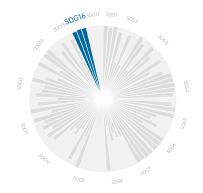
1,056 cases were mediated using a mobile visual mediation platform,

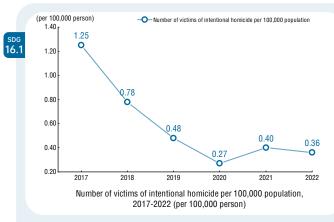
which took an average of just 6.42 days.



^{*}Data on this page are statistics of 2022 unless otherwise noted.

Lincang has an excellent performance in SDG16, with the evaluation results always above 90 points from 2017 to 2022. In 2022, the overall score for SDG16 was 99.64 points, with scores of 99.1, 100, and 99.82 for specific indicators as the number of victims of intentional homicide per 100,000 population, coverage of public legal service stations at the township (street), disclosure rate of court trial process information respectively.

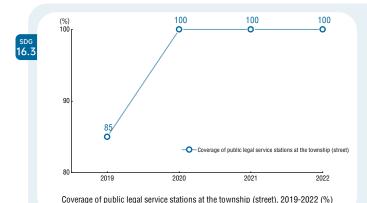




Data Source: Lincang Municipal Public Security Bureau

Lincang City has taken measures such as investigating places with complex public security situations, investigating and resolving potential risks of various homicide cases, and improving the system for investigating and preventing homicides. Through these efforts, the prevention and control of major safety risks has been effectively intensified in lincang.

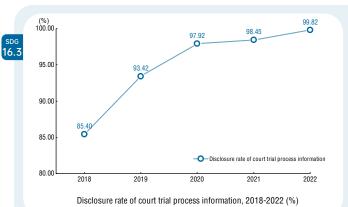
The data show that from 2017 to 2022, the number of victims of intentional homicide per 100,000 population in lincang has been on a downward trend, decreasing from 1.25 people to 0.36 people.



Data Source: Lincang Municipal Bureau of Justice

Lincang City has established a multi-level public legal service system spanning city, county (district), township, and village levels, striving to meet the diverse legal service needs of the people and support the development of social security.

The data show that, the coverage of public legal service stations at the township (street) of lincang increased from 85% in 2019 to 100% in 2020 and has remained stable since.



Data Source: Lincang Municipal People's Court

Since 2018, Lincang City has been implementing the disclosure of judicial process information by leveraging information technology. By continually increasing the transparency of trial processes, court activities, judgment documents, and enforcement information, the city has been strengthening the information disclosure of trial and enforcement, and actively promoting the rule of law.

The data indicate that from 2018 to 2022, the disclosure rate of the court trial process information in lincang has steadily increased, rising from 85.40% to 99.82%.

■ The "Lincang without Lawsuits" Digital Platform for Enhancing Judicial Efficiency

To address the challenges of high litigation costs faced by residents in Lincang's mountainous are due to transportation constraints, Lincang City has initiated the digital development of a "Smart Court" application. This innovative platform leverages information technology to streamline litigation services, judicial trials, and management, fostering a more efficient and equitable legal environment. The platform introduces online functionalities, including evidence display, remote video mediation, online agreement signing, judicial confirmations, and case filing, all accessible through smartphones, eliminating the need for in-person visits. Users can seamlessly communicate with court staff, register disputes, and receive prompt resolution through task assignment. Upon completion, case information is transferred to the court's information system. Following a judge's review, judicial confirmation documents are generated and uploaded to the platform, allowing involved parties to check details via their mobile phones.

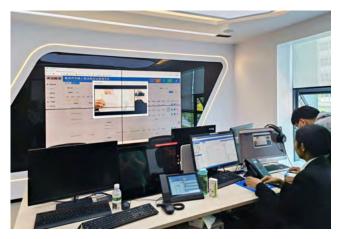


Figure 5.48 "Lincang without Lawsuits" platform in action: users engaged in online dispute resolution and judicial processes

The system effectively integrates various dispute resolution resources, aligning internet technology with grassroots social governance and legal processes. This not only benefits the public by lowering litigation costs but also optimizes the allocation of judicial resource, thereby enhancing the overall efficiency of the judiciary. By June 2023, "Lincang without Lawsuits" successfully mediated 1,056 disputes online, achieving an average processing time of 6.42 days. In December 2022, the platform was recognised as the 2022 National Political and Legal Intelligent Construction Smart Court Innovation Case in China, underscoring its impact and innovation in the legal landscape.

■ Promoting Legal Awareness Through Varied Publicity Services

In a dedicated effort to cultivate legal awareness, literacy, and a deeper understanding of legal concepts within the community, Lincang City has devised a specialized legal publicity and education plan. This initiative targets both government employees and the public, with the overarching goal of contributing to the establishment of a just, stable, and orderly legal society.

Lincang employs a multifaceted approach to legal publicity, organising a spectrum of activities aligned with national strategic planning, business environment optimization, epidemic prevention, cross-border crime crackdowns, and the eradication of illegal activities. Key departments at all levels actively participate, strategically seizing crucial moments to implement diverse legal publicity and education initiatives.



Figure 5.49 Staff conducting legal publicity to all ethnic groups

Simultaneously, entities such as the People's Court, Justice Bureau, Public Security Bureau, Housing and Urban-rural Development Bureau, and Taxation Administration leverage major holidays, themed publicity days, anniversaries of the issuance or implementation of significant laws and regulations. They disseminate legal knowledge through on-site activities, display boards, brochure distribution, and other methods.

Moreover, Lincang harnesses its grassroots governance system to conduct legal training within communities, extending legal information dissemination through various media platforms, including radio, television, WeChat, Weibo, TikTok, Kuaishou, and more. This ongoing effort aims to continually elevate the depth and reach of legal publicity. By the end of 2022, public legal services at the grassroots level covered 100% of the area, with 435 national, provincial, and city-level democratic rule of law demonstration villages established. In 2022, the legal coverage rate in Lincang's border towns, administrative villages, and border villages reached 100%. At all levels, the city organised over 1,100 study sessions and more than 1,060 publicity activities, collectively educating a total of 700,000 person-times.

SDG17 Partnerships for Goals

International community

The United Nations emphasizes the importance of cross-border cooperation, policy coordination, and multi-party participation to achieve common prosperity, fairness, and a sustainable future. This requires collaboration among different countries, institutions, and sectors of society, enhancing resource sharing, knowledge exchange, and cooperative actions to achieve global sustainable development.

China

China is an active advocate and practitioner of global development partnerships. While solidly advancing its own implementation work, China upholds the principles of extensive consultation, joint contribution, and shared benefits to promote the Belt and Road Initiative. China is committed to pursuing the greater good and shared interests, and upholding the principles of amity, sincerity, mutual benefit, and inclusiveness for expanding relations with neighboring countries. To this end, President Xi has taken advantage of many major international occasions to announce a broad range of cooperation measures. These present China's approach, offer its vision, and contribute its strength to resolving global development issues and implementing the 2030 Agenda for Sustainable Development.

Lincang

Taking advantage of the opening of the China-Myanmar new corridor, Lincang actively promotes cross-border economic cooperation with Myanmar. Through developing the border economic cooperation zone, establishing mutual aid groups and trade cooperatives for border residents, creating border schools and applied universities at the border, Lincang enhances China-Myanmar economic and cultural cooperation, improving social harmony and stability in border areas.

中缅企业经贸合作洽谈会暨签约

ஷ[2〕のか 缅甸・内比都

J6- g- JoJ? 2023年5月26日

க்காப்புப்குக்கையாக கிராவுக்குவந்தைப்பைவுகிறு நிலரிக்குவியில் விறியில் விறியில்



Strengthen the means of implementation, and revitalize the global partnership for sustainable development



Prominent Regional Hub Function

With the operation of the new China-Myanmar corridor, Lincang becomes a node

on the closest land passage for China to connect to the Indian Ocean.

It has **3** open ports, **6** border civilian channels, **4** border trade markets, and **5** roads leading to Myanmar.

Constantly Promote Bilateral Economic and Trade Cooperation with Myanmar

In 2017,

Lincang and Lashio of Myanmar established an international sister city relationship to strengthen cooperation in infrastructure construction, energy, agriculture, and manufacturing.









Offer Cross-border Education and Entrepreneurship Opportunities

Established **5** "national gateway schools", receiving over 3,000 cross-border students from Myanmar each year and training 150 Myanmar teachers.

Established Myanmar College Students
Pioneer Park, established 3 external
entrepreneurship cooperation bases,
with 14 enterprises settled in by 2020.

Support Myanmar in the Prevention and Control of COVID-19

Lincang acted promptly to treat Myanmar patients of

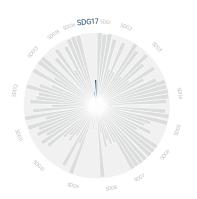
over 100,000, and donated 100,000 medical surgical

masks to the Ministry of Commerce of Myanmar.

^{*}Data on this page are statistics of 2022 unless otherwise noted.

Lincang City faces significant opportunities for enhancement in SDG17, with evaluation scores consistently below 30 points from 2017 to 2022, reaching an overall score of 21.97 in 2022.

By 2022, Lincang City has established international friendly city relationships with Dubna in Russia, Gampola in Sri Lanka, Lashio in Myanmar, and the Khoueng Keb Province in Cambodia. Actively aligning itself with major development strategies such as the Belt and Road Initiative (BRI), Regional Comprehensive Economic Partnership (RCEP), Bangladesh-China-India-Myanmar Economic Corridor(BCIM), Greater Mekong Subregion (GMS), and China-ASEAN Free Trade Area (CAFTA), the city is dedicated to robust foreign economic and trade cooperation. The city is committed to constructing a global partnership that supports the realization of sustainable development goals.



■ Facilitating China-Myanmar Economic Cooperation: Success of Border Trade Fair

Launched in Lashio, Myanmar, in 2019, the border trade fair between Myanmar and China has become an important platform for fostering economic and trade cooperation. To facilitate this fair, a delegation of 214 government and enterprise representatives from China received approval for participation, marking the first large-scale passport transit at the China-Myanmar border via the Mengding Qingshuihe Port in Lincang. Subsequent editions, starting in 2020, alternated between the two countries and transitioned to online formats in 2021 and 2022.

The fourth edition, held offline in Myanmar's capital, Nay Pyi Taw from May 25 to 28, in 2023, achieved an on-site transaction amount of 5 million Chinese yuan, attracting over 10,000 attendees and facilitating contracts worth over



Figure 5.50 The opening ceremony of the fourth Myanmar (Lashio) - China (Lincang) border trade fair in Nay Pyi Taw, Myanmar, May 25, 2023

800 million Chinese yuan. The fair has effectively promoted economic, trade, and cultural exchanges between China and Myanmar, solidifying its position as a vital platforms for enhancing economic and trade cooperation in the border areas.

■ Fostering Cross-border Prosperity: Lincang Border Economic Cooperation Zone

In a bid to enhance external engagement, Lincang City started the construction of the Border Economic Cooperation Zone in December 2011. In September 2013, the zone was approved by the State Council of China to become the 16th national-level border cooperation zone, and the first in Yunnan Province since 1992. Further elevating its status, the zone was designated as a national key area for border development and opening up by the State Council in December 2015.

Strategically cantered around the 3 national-level ports of Mengding Qingshuihe, Nansan, and Yonghe, the zone concentrates on bolstering import and export processing as well as cross-border trade logistics. Since its establishment, Lincang has instituted a dedicated coordination management



Figure 5.51 Myanmar workers coming to China processing their paperwork at the immigration service hall of Mengding Qingshuihe Port

agency, implementing policies and spearheading construction projects in key areas such as infrastructure, customs clearance processes, investment and finance, fiscal and taxation, land use, industry development, and public services. As of 2022, the park has attracted 1,882 diverse business entities, contributing to the region's economic vibrancy.

Bridging nations: China-aided Kunlong Bridge in Myanmar Promoting the China-Myanmar Economic Corridor

The Kunlong Bridge, spanning the Salween River (Nujiang River in China), stands as a vital maritime and railway link between China and Myanmar. Originally built with Chinese government assistance in the 1960s, the aging structure, supporting only 20-ton loads, struggled to meet the evolving economic needs of the region. Recognizing the imperative to enhance connectivity, representatives from both nations signed a diplomatic document in Naypyidaw in March 2018, initiating the Chinese-aided Kunlong Bridge project in Myanmar. Delegated to Yunnan Province by China's Ministry of Commerce in September 2018, the project marked the first complete foreign aid project managed by Yunnan on behalf of the national Ministry. In January 2020, during Chinese President Xi Jinping's state visit to Myanmar, he and Myanmar's State Counsellor Aung San Suu Kyi witnessed the signing of 29 cooperative documents in various fields, including the implementation agreement between the Ministry of Commerce of China and the Myanmar Ministry of Construction for the Kunlong Bridge project.

This pivotal project, spanning 4.59 km, includes a new 286-metre-long Kunlong Bridge and 4.3 km of connecting roads. Commencing construction in December 2020, the main bridge was successfully connected in April 2023, passing a midterm inspection in June with an excellent quality evaluation. With a capacity to support 70-ton trucks, the Kunlong Bridge significantly enhances transportation and logistics between China and Myanmar, playing a crucial role in promoting trade development between the two countries.



Figure 5.52 On April 12, 2023, the China-aided Kunlong Bridge in Myanmar was successfully connected

■ "East-West Labour Collaboration" Supports Local Employment and Income Growth

In 1996, the Chinese government launched the "East-West Pairing-off Cooperation" practice to bridge regional development gaps, enhance cooperation, and promote common prosperity. Under the cooperation framework, more developed eastern provinces (municipalities), cities that enjoy provincial-level status, and major cities in east China have been paired with less developed provinces, autonomous regions and municipality in west China for more equitable development and resource distribution. In 2017, leveraging national support policies and the agreement between Shanghai and Yunnan Province, all 8 counties/district of Lincang City established a collaboration with Chongming District of Shanghai.

Focused on labour and human resource transfers, vocational training, and labour services branding, this collaboration led to the signing of a "Labour Collaboration Framework Agreement"



Figure 5.53 Farewell ceremony for the special train carrying migrant workers under the Shanghai-Yunnan labour cooperation

between Lincang City and Chongming District. Lincang, as a result, established a robust labour export mechanism, building a stable labour cooperation network cantered in Shanghai and extending to Guangdong, Zhejiang, Jiangsu, Hunan, and other regions. The collaboration has yielded significant outcomes, with Chongming District investing a cumulative total of 1.4 billion Chinese yuan in Lincang, implementing over 800 projects, and creating employment opportunities for 1.26 million person-times by 2022.

06

Lincang has always been committed to building an environmentally friendly, inclusive and economically stable city, achieving sustainable development for all. To achieve the SDGs outlined in the *2030 Agenda for Sustainable Development*, we focus on engineering construction, policy support and capacity building in four key task areas. Our aim is to be able to summarize practical, replicable and promotable experiences, offering practical references for similarly less-developed, multi-ethnic borderland areas, both domestically and internationally.

This report represents our first Voluntary Local Review under the 2030 Agenda. We seek to objectively evaluate our progress and challenges in implementing the SDGs and share our priorities, actions, and thoughts on our own sustainable development path with the global community.

In presenting the VLR, we would like to share the following:

1. Integrate the SDGs comprehensively into mediumand long-term development plans, policies and strategies, clearly defining our tasks.

Recognizing the 2030 Agenda for Sustainable Development as a universally agreed-upon strategic and action framework at the national level, with local governments as vital agents, we emphasize the importance of our work in implementing the 2030 Agenda. National-level development goals, guarantee mechanisms, and policy measures provide the basis for clarifying our development vision, breaking down tasks and objectives, and coordinating overall policy implementation.

Our initiatives involve researching and formulating a system of SDGs suitable for local conditions, compiling a local sustainable development plan and an action plan through 2030, and promoting the unification and coordination of policies related to sustainable development.

2. Develop a localized sustainable development indicator system aligned with engineering construction measures in various fields and functional departments, proposing systematic solutions.

While the 17 SDGs offer a comprehensive reference framework applicable to guiding sustainable development vision interpretation at the local level, specific targets and indicators may not directly apply to Lincang, a less-developed city with a multi-ethnic population along the border. In addition, the SDGs are interconnected and mutually reinforcing, with multiple goals spanning different areas of work.

Therefore, we adopted an integrated approach, identifying four key task areas for breakthroughs in urban management. We have integrated different SDGs into these areas, establishing an indicator system consistent with Lincang's

context. Other construction projects in the economic, social and environmental fields are related to specific indicators during implementation. Each goal is transformed in a specific and targeted manner through the construction of supporting projects.

3. Build a cooperative platform and establish partnerships, breaking through the constraints of weak local development foundations, and narrowing and addressing gaps and weaknesses related to SDGs in Lincang City.

The implementation of the 2030 Agenda for Sustainable Development requires not only cooperation between government departments and public institutions at different levels and with different functions but also the full utilization of the expertise and initiative of business, academia, the public and other stakeholders.

For Lincang, the diversity of the ecosystem and rich ethnic culture are important driving forces for sustainable development. By building extensive partnerships, we can alleviate the shortage of resources such as talent, technology, education, and medical care, forming a consensus that is crucial to comprehensively improving sustainable development capabilities.

Therefore, on the one hand, we strive to enhance the recognition and responsibility of local organisations and the public for the 2030 Agenda. On the other hand, through project implementation and platform building, we actively establish partnerships with domestic and foreign institutions to form a multi-stakeholder joint construction mechanism, including governments, enterprises, and scientific research institutes, which effectively supplements government functions and enhances sustainable development capabilities.

Main Experiences

4. Secure financial support, establish financing mechanisms, and strive to increase funding sources for SDGs implementation.

Stable financial support is the foundation for implementing relevant construction projects, placing objective requirements on the stable growth and financing capacity of Lincang's economy. Leveraging the rich local resources, national and Yunnan provincial strategic planning, and support policies, we have progressively improved the construction of Lincang's transportation infrastructure and public welfare facilities with the support of funds from various departmental projects. This has enhanced the living environment in rural areas.

Simultaneously, we focus on optimizing the business environment, expanding financing channels, and actively attracting investment from the private sector. This has laid the groundwork for the upgrading and development of plateau characteristic agricultural products and tourism services. Providing additional fiscal space and financing channels for the ongoing development of Lincang remains the direction of our efforts.

5. Oriented by addressing bottlenecks, harness the leading role of innovation, and mobilizing enthusiasm from departments and enterprises at all levels through demonstration projects.

Promoting the integration and development of scientific and technological innovation with environment, economy, society, and culture is an important approach to address key bottlenecks such as the lagging economic form and the weak transformation ability of featured resources in Lincang.

We continuously innovate policies and environments for entrepreneurship, encouraging ongoing investment in scientific research. Focused on plateau characteristic agriculture, we aim to extend the industrial chain through innovation and promote the upgrading and development of the entire chain, opening up new areas for the development of traditional industries in less-developed areas.

We have strengthened the construction of digital infrastructure, applying information technologies such as big data, the Internet, and the Internet of Things to ecological conservation, community governance, legal construction, and agricultural product sales. Through the construction of demonstration projects, we have demonstrated the application scenarios

and driving effects of innovation, enhancing the enthusiasm and participation of various government departments at all levels, enterprises, rural cooperatives and local residents in innovation and entrepreneurship.

In the future, we will continue to carry out innovation, enhance the innovation awareness and capability of the whole society, serve the needs of the general public in work and life, and support the sustainable development of Lincang's urban and rural areas.

6. Formulate policies for actions, clarify roles and responsibilities across departments at all levels, and promote responsible units to fulfil their duties.

Establishing regulatory frameworks and codes of conduct is an important guarantee for achieving the SDGs. In our specialized sustainable plan and action plan, we have clearly defined the responsible departments for corresponding tasks. We have systematically allocated responsibilities for the localized sustainable development indicators, setting up a mechanism that includes regular reporting, special supervision, target assessment, inspection and deliberation.

To guide and urge relevant departments to carry out their work, ensure the implementation of various tasks, we have established key action groups and a comprehensive working group led by municipal leaders. Detailed project scheduling and implementation plans have been formulated, ensuring that each task is effectively executed, advancing the overall process of Lincang's sustainable development.



07

Over the past six years, Lincang City has made consistent progress in the areas of ecological conservation, infrastructure development, characteristic industries, human settlements, social welfare, and international exchanges, overcoming challenges posed by a low economic level, weak industrial foundation, and a lack of modern governance elements. The issue of absolute poverty has been successfully addressed, marking a remarkable achievement. The development of modern infrastructure networks, including railways and highways, has experienced historic breakthroughs, providing a strong foundation for improved connectivity. This advancement has led to the creation of new advantages and opportunities in plateau agriculture and featured industries, unlocking the value of ecological, ethnic cultural and other resources. The momentum for implementing the Sustainable Development Goals is clearly robust and continues to gain traction.

To build a healthy, prosperous, inclusive and vibrant Lincang, ensure the rights and wellbeing of people from all ethnic groups and achieve the SDGs in the 2030 Agenda for Sustainable Development, we will continue to work on the following key aspects:

Put the people at the centre, leave no ethnic group behind, and leave no one behind.

We will continue our efforts in improving employment, education, healthcare, social security, housing, elderly care and environmental protection. We will expand the coverage of minimum subsistence allowances and enhance the capacity of social services to improve the living conditions. We will promote the empowerment of individuals with disabilities, women, children and the elderly. We will steadfastly support the development of people from all ethnic groups, particularly those with small populations, as we strive for a sustainable future for all.

Put the protection of the ecological environment as a development priority and promote the harmonious coexistence between human and nature.

We will continue to promote green production and lifestyles. We are dedicated to enhancing the green, low-carbon circular economic system, reducing greenhouse gas emissions, strengthening biodiversity- protection, and maintaining a harmonious balance between human well-being and ecological management, contributing to the mitigation of global climate change.

Build a green industrial system to promote high-quality and sustainable economic development.

We will continue to foster innovation and entrepreneurship, promote the extension and upgrading of industrial chains with plateau characteristics. Our efforts will involve nurturing emerging industries such as processing trade, biomedicine, comprehensive health care services, cultural tourism, and digital economy. We will create digital and green economic employment opportunities. We aim to enhance our capacity for inclusive and sustainable economic growth.

Next Steps

Maintain cultural diversity and promote the common development of all ethnic groups in border areas.

We will continue to protect and inherit ethnic culture, further strengthen ethnic unity and progress. Our focus remains on fostering harmonious and prosperous development in urban and rural areas along the border. Leveraging the construction of the China-Myanmar economic corridor, we will persist in promoting the upgrading and development of the industrial economy and foreign trade in the border areas. We aim to achieve stable and continuous growth in social and economic development within the multi-ethnic border areas.

Strengthen external exchanges and cooperation to jointly achieve SDGs.

We will continue to leverage our geographic advantages to contribute national strategies. Our focus will be on enhancing communication and learning from other countries and cities, sharing Lincang's experiences in implementing the SDGs with the international community. Through collaborative effors, we aim to jointly promote the implementation of the 2030 Agenda for Sustainable Development.

Implement policy and mechanism guarantees to provide stable project and financial support.

We will continue to refine our policy system, advancing engineering projects, and fostering active engagement from government agencies at all levels, enterprises, and the public. Furthermore, we are committed to providing fiscal and financing support to ensure the effective implementation of the SDGs.



Appendices

Appendix 1 The Target Value and the Worst Value of Lincang's SDG Indicators

Indicator	Target Value	Source	Worst Value	Source
SDG1: No Poverty	- raido		- raido	
Incidence of poverty (%)	$0_{\rm I}$	United Nations (2015), The 2030 Agenda for Sustainable Development.	100 ^v	-
Percentage of urban residents entitled to minimum living allowance (%)	0^{v}	_	100 ^v	_
Participation rate of basic medical insurance (%)	$100^{\rm v}$	-	$0^{\rm v}$	-
SDG2: Zero Hunger				
Underweight rate among children under-five (%)	0_{I}	United Nations (2015), The 2030 Agenda for Sustainable Development .	16.3 ^I	United Nations (2015), The 2030 Agenda for Sustainable Development.
Agricultural labour productivity (10,000 yuan/person)	$8_{\rm I}$	United Nations (2015), The 2030 Agenda for Sustainable Development .	$0^{\rm v}$	_
Qualification rate of sampling inspection of edible agricultural products (%)	$100^{\rm v}$	_	$0^{\rm v}$	_
Grain yield per unit area	8,600 ^{III}	Bertelsmann Stiftung and Sustainable Development Solutions Network (2018). SDG Index and Dashboards Report 2018.	600 ¹¹	Bertelsmann Stiftung and Sustainable Development Solutions Network (2018). SDG Index and Dashboards Report 2018.
(kg / hectare)	7,000 ^{III}	Sachs, J.D., Lafortune, G., Fuller, G., & Drumm, E (2023). Sustainable Development Report 2023.	200 ^{III}	Sachs, J.D., Lafortune, G., Fuller, G., & Drumm, E (2023). Sustainable Development Report 2023.
SDG3: Good Health and Well-Being)			
Maternal mortality ratio (per 100,000 persons)	70 ¹	United Nations (2015), The 2030 Agenda for Sustainable Development.	814 ^{III}	Bertelsmann Stiftung and Sustainable Development Solutions Network (2018). SDG Index and Dashboards Report 2018.
(per 100,000 persons)		Sustamable Development.		Sachs, J.D., Lafortune, G., Fuller, G., & Drumm, E (2023). Sustainable Development Report 2023.
Infant mortality rate (%)	1.1 ¹	United Nations (2015), The 2030 Agenda for Sustainable Development.	39.7 ^{III}	Bertelsmann Stiftung and Sustainable Development Solutions Network (2018). SDG Index and Dashboards Report 2018. Sachs, J.D., Lafortune, G., Fuller, G., & Drumm, E (2023). Sustainable Development Report 2023.
Reported morbidity rate of notifiable infectious diseases	$0_{\rm I}$	United Nations (2015), The 2030 Agenda for Sustainable Development.	392.07 ^{IV}	National Health Commission of the People's Republic of China (2019). China Health Statistical Yearbook 2018. National Health Commission of the People's Republic of
(per 100,000 persons)			589.41 ^{IV}	China (2021). China Health Statistical Yearbook 2020. Bertelsmann Stiftung and Sustainable Development
Road traffic death rate (per 100,000 persons)	3.2 ¹	United Nations (2015), The 2030 Agenda for Sustainable Development.	33.7 ^{III}	Solutions Network (2018). SDG Index and Dashboards Report 2018. Sachs, J.D., Lafortune, G., Fuller, G., & Drumm, E (2023). Sustainable Development Report 2023.
Beds of health care institutions per 1000 population (bed/1,000 persons)	7.92 ^{IV}	National Bureau of Statistics of the People's Republic of China (2023). China Statistical Yearbook 2022.	$0^{\rm v}$	_
Number of licenced physicians & physician assistants per 1000 persons (per 1,000 person)	3.93 ^{IV}	National Bureau of Statistics of the People's Republic of China (2023). China Statistical Yearbook 2022.	$0^{\rm v}$	_
Vaccination rates under the National Immunization Programme for eligible children (%)	100 ^I	United Nations (2015), The 2030 Agenda for Sustainable Development.	41 ¹	United Nations (2015), The 2030 Agenda for Sustainable Development.
Average life expectancy	73.6 ^{III}	Bertelsmann Stiftung and Sustainable Development Solutions Network (2018). SDG Index and Dashboards Report 2018.	46.1 ^{III}	Bertelsmann Stiftung and Sustainable Development Solutions Network (2018). SDG Index and Dashboards Report 2018.
(year of age)	83 ^{III}	Sachs, J.D., Lafortune, G., Fuller, G., & Drumm, E (2023). Sustainable Development Report 2023.	54 ^{III}	Sachs, J.D., Lafortune, G., Fuller, G., & Drumm, E (2023). Sustainable Development Report 2023.
SDG4: Quality Education		State Council of the Bookle's Bookle's of China (2004)		United Nations Educational Scientific and Cultural
Gross enrollment rate of preschool education (%)	$100^{\rm II}$	State Council of the People's Republic of China (2021), The Outline of the 14th Five-Year Plan (2021-2025) for National Economic and Social Development and the	11 ^{III} 35 ^{III}	United Nations Educational, Scientific and Cultural Organization (2017). SDG4 Data. Sachs, J.D., Lafortune, G., Fuller, G., & Drumm, E
		Long-Range Objectives Through the Year 2035.		(2023). Sustainable Development Report 2023. Bertelsmann Stiftung and Sustainable Development Solutions Network (2018). SDG Index and Dashboards
Enrollment rate of primary schoolage children (%)	100 ¹	United Nations (2015), The 2030 Agenda for Sustainable Development.		Report 2018. Sachs, J.D., Lafortune, G., Fuller, G., & Drumm, E (2023). Sustainable Development Report 2023.
Consolidation rate of compulsory education (%)	100 ^v	-	$0^{\rm v}$	-
Enrollment rate of children with disabilities in compulsory education (%)	100 ^v	_	$0^{\rm v}$	_
Student-teacher ratio in primary education	15 ^{III}	Organization for Economic Co-operation and Development (2023). Education at a Glance 2023: OECD Indicators.	54.8 ^{III}	World Bank (2020). World Bank Data.

Continued

Indicator	Target Value	Source	Worst Value	Source
Student-teacher ratio in junior secondary education	13 ^{III}	National Bureau of Statistics of the People's Republic of China (2023). China Statistical Yearbook 2022.	41 ^{III}	World Bank (2020). World Bank Data.
People with a junior college degree or above per 100,000 persons	33,242 ^{IV}	National Bureau of Statistics of the People's Republic of China (2023). China Statistical Yearbook 2022.	$0^{\rm v}$	_
Average schooling years of working- age population (year)	11.3 ^{II}	State Council of the People's Republic of China (2021), The Outline of the 14th Five-Year Plan (2021-2025) for National Economic and Social Development and the Long-Range Objectives Through the Year 2035.	$0^{\rm v}$	_
Adult illiteracy rate (%)	$0_{\rm iii}$	Bertelsmann Stiftung and Sustainable Development Solutions Network (2018). SDG Index and Dashboards Report 2018. Sachs, J.D., Lafortune, G., Fuller, G., & Drumm, E (2023). Sustainable Development Report 2023.	45.2 ^{III}	Bertelsmann Stiftung and Sustainable Development Solutions Network (2018). SDG Index and Dashboards Report 2018. Sachs, J.D., Lafortune, G., Fuller, G., & Drumm, E (2023). Sustainable Development Report 2023.
SDG5: Gender Equality		(2020). Gastamasio 2010topent Hopert 2020.		Casamasis Deterop.no.n. repetit 2020.
Net enrollment rate of primary school-age girls (%)	100^{v}	_	$0^{\rm v}$	_
Proportion of seats held by women in the Municipal People's Congress and the Chinese People's Political Consultative Conference (%)	50 ¹	United Nations (2015), The 2030 Agenda for Sustainable Development.	1.2 ¹	United Nations (2015), The 2030 Agenda for Sustainable Development.
Percentage of women in civil servants (%)	50 ^I	United Nations (2015), The 2030 Agenda for Sustainable Development.	1.2 ¹	United Nations (2015), The 2030 Agenda for Sustainable Development.
SDG6: Clean Water and Sanitation				
Coverage rate of rural population with access to tap water (%)	100 ^{III}	Sachs, J.D., Lafortune, G., Fuller, G., & Drumm, E (2023). Sustainable Development Report 2023.	14.1 ^{III} 10.5 ^{III}	Bertelsmann Stiftung and Sustainable Development Solutions Network (2018). SDG Index and Dashboards Report 2018. Sachs, J.D., Lafortune, G., Fuller, G., & Drumm, E (2023). Sustainable Development Report 2023.
Coverage rate of rural population with sanitary toilet (%)	100 ^{III}	Sachs, J.D., Lafortune, G., Fuller, G., & Drumm, E (2023). Sustainable Development Report 2023.	9.7 ^{III}	Bertelsmann Stiftung and Sustainable Development Solutions Network (2018). SDG Index and Dashboards Report 2018. Sachs, J.D., Lafortune, G., Fuller, G., & Drumm, E (2023). Sustainable Development Report 2023.
Compliance rate for centralized drinking water source quality in cities (%)	100^{v}	-	$0^{\rm v}$	_
Proportion of surface water of Grade III or better quality (%)	$100^{\rm v}$	_	$0^{\rm v}$	_
Urban domestic sewage treatment rate (%)	100 ^{III}	Bertelsmann Stiftung and Sustainable Development Solutions Network (2018). SDG Index and Dashboards Report 2018. Sachs, J.D., Lafortune, G., Fuller, G., & Drumm, E (2023). Sustainable Development Report 2023.	0 ^{III}	Bertelsmann Stiftung and Sustainable Development Solutions Network (2018). SDG Index and Dashboards Report 2018. Sachs, J.D., Lafortune, G., Fuller, G., & Drumm, E (2023). Sustainable Development Report 2023.
SDG7: Affordable and Clean Energ	у	(2023). Sustamable Development Neport 2023.		Sustainable Development Report 2023.
Population with access to electricity (%)	100 ^{III}	Bertelsmann Stiftung and Sustainable Development Solutions Network (2018). SDG Index and Dashboards Report 2018. Sachs, J.D., Lafortune, G., Fuller, G., & Drumm, E (2023). Sustainable Development Report 2023.	9.1 ^{III}	Bertelsmann Stiftung and Sustainable Development Solutions Network (2018). SDG Index and Dashboards Report 2018. Sachs, J.D., Lafortune, G., Fuller, G., & Drumm, E (2023). Sustainable Development Report 2023.
Renewable energy as a percentage of total electric power generation (%)	70 ¹	United Nations (2015), The 2030 Agenda for Sustainable Development.	$0_{\rm I}$	United Nations (2015), The 2030 Agenda for Sustainable Development.
Energy consumption per 10,000 yuan of GDP (ton/10,000 yuan)	0.264 ^{III}	World Bank (2020). World Bank Data.	ND^{v}	_
Reduction of energy consumption per 10,000 yuan of GDP (%)	2.7 ^{II}	State Council of the People's Republic of China (2021), The Outline of the 14th Five-Year Plan (2021-2025) for National Economic and Social Development and the Long-Range Objectives Through the Year 2035.	$0^{\rm v}$	_
Coverage of urban population with access to gas (%)	$100^{\rm v}$		$0^{\rm v}$	_
SDG8: Decent Work and Economic	Growth			
Per capita GDP (yuan/person)	75,717.8 ^{III}	World Bank. (2022). World Bank Data.	4,232.5 ^{III}	World Bank. (2022). World Bank Data.
Overall labour productivity (yuan)	131,000 ^{IV}	National Bureau of Statistics of the People's Republic of China (2023). China Statistical Yearbook 2022.	$0^{\rm v}$	_
Average monthly wage of employees in urban non-private units (yuan)	12,878.12 ^{IV}	National Bureau of Statistics of the People's Republic of China (2023). China Statistical Yearbook 2022.	$0^{\rm v}$	_
Registered unemployment rate in urban area (%)	2.46 ^{IV}	National Bureau of Statistics of the People's Republic of China (2023). China Statistical Yearbook 2022.	4 ^{IV} 4.14 ^{IV}	National Bureau of Statistics of the People's Republic of China (2019). China Statistical Yearbook 2018. National Bureau of Statistics of the People's Republic of China (2023). China Statistical Yearbook 2022.
Deaths in safety production accident per 100 million yuan GDP (person)	$0^{\rm v}$	-	3.34^{V}	_
SDG9: Industry, Innovation and Inf Proportion of R&D expenditure of industrial enterprises above designated size to the gross output value of industrial enterprises above designated size (%)	rastructure	National Bureau of Statistics of the People's Republic of China (2023). China Statistical Yearbook 2022.	$0^{ m v}$	_

Continued

Continued				
Indicator	Target Value	Source	Worst Value	Source
Ratio of total Research and Experimental Development (R&D) expenditure in GDP (%)	3.7 ^{III}	Bertelsmann Stiftung and Sustainable Development Solutions Network (2018). SDG Index and Dashboards Report 2018. Sachs, J.D., Lafortune, G., Fuller, G., & Drumm, E (2023). Sustainable Development Report 2023.	0_{III}	Bertelsmann Stiftung and Sustainable Development Solutions Network (2018). SDG Index and Dashboards Report 2018. Sachs, J.D., Lafortune, G., Fuller, G., & Drumm, E (2023). Sustainable Development Report 2023.
Full-time equivalent of Research and Experimental Development (R&D) personnel per 10 thousand persons (10,000 persons year)	60.04 ^{IV}	National Science and Technology Statistics Data Centre of the People's Republic of China (2021). China Science and Technology Indicators Database.	$0^{\rm v}$	
Proportion of output value of high- tech industries above designated size to total industrial output value above designated size (%)	66 ^{IV}	National Bureau of Statistics of the People's Republic of China (2023). China Statistical Yearbook 2022.	0^{v}	_
Invention patents per 10,000 people	115.7 ^{III}	Bertelsmann Stiftung and Sustainable Development Solutions Network (2018). SDG Index and Dashboards Report 2018. Organization for Economic Co-operation and Development (2021). OECD Data.	0.1 ^{III}	Bertelsmann Stiffung and Sustainable Development Solutions Network (2018). SDG Index and Dashboards Report 2018. Organization for Economic Co-operation and Development (2021). OECD Data.
Mobile phone popularization rate (%)	100°	_	$0^{\rm v}$	_
Towns and townships have access to highways of Grade III or above (%)	$100^{\rm v}$	_	$0^{\rm v}$	_
Popularization rate of household with fixed internet broadband access(%)	$100^{\rm v}$	_	$0^{\rm v}$	_
SDG10: Reduced Inequalities				
Urban and rural income ratio (%)	1.6 ^{III}	Food and Agriculture Organization of the United Nations (2021). FAO Data.	3111	Food and Agriculture Organization of the United Nations (2021). FAO Data.
Engel coefficient of urban households (%)	$20^{\rm v}$	_	$60^{\rm v}$	_
Engel coefficient of rural households (%)	$20^{\rm v}$	_	60 ^v	_
Minimum living allowance in urban areas (yuan/month)	1,170 ^{IV}	National Bureau of Statistics of the People's Republic of China (2023). China Statistical Yearbook 2022.	$0^{\rm v}$	_
Minimum living allowance in rural areas (yuan/month)	530 ^{IV}	National Bureau of Statistics of the People's Republic of China (2023). China Statistical Yearbook 2022.	$0^{\rm v}$	_
SDG11: Sustainable Cities and Cor	nmunities			
Proportion of expenditure for housing security to the general public budget expenditure of local governments (%)	6^{IV}	National Bureau of Statistics of the People's Republic of China (2023). China Statistical Yearbook 2022.	$0^{\rm v}$	_
Length of public transportation lines per 100,000 persons (km/100,000 persons)	193.3 ^{IV}	National Bureau of Statistics of the People's Republic of China (2023). China Statistical Yearbook 2022.	$0^{\rm v}$	_
Coverage rate of municipal domestic waste sorting service in communities (%)	100 ^{IV}	National Bureau of Statistics of the People's Republic of China (2023). China Statistical Yearbook 2022.	$0^{\rm v}$	_
PM _{2.5} annual average concentration	15 ¹¹	Ministry of Environmental Protection of the People's Republic of China & General Administration of Quality	77.8 ^{IV}	World Bank (2017). World Bank Data.
(microgram / cubic metre)		Supervision, Inspection and Quarantine (2012). Ambient Air Quality Standards (GB3095-2012).		World Bank (2021). World Bank Data.
Proportion of days with good air quality in urban area (%)	$100^{\rm v}$	_	$0^{\rm v}$	_
Area of public recreational green space per capita (square metre/person)	16.6 ^{IV}	National Bureau of Statistics of the People's Republic of China (2023). China Statistical Yearbook 2022.	$0^{\rm v}$	_
Percentage of areas under the sponge cities' construction requirements in built-up area (%)	$30^{\rm v}$	_	$0^{\rm v}$	_
SDG12: Responsible Consumption	and Produ	uction		
Safe disposal rate of industrial hazardous wastes (%)	$100^{\rm v}$	_	$0^{\rm v}$	_
Rate of domestic garbage harmless treatment in rural area (%)	100°	_	$0^{\rm v}$	_
Procurement scale of energy-saving and environmental-friendly products as a proportion of the procurement scale of similar products (%)	100 ^v	_	$0^{\rm v}$	_
Integrated reuse ratio of common industrial solid wastes (%)	100 ^v		$0^{\rm v}$	
Consumption of chemical fertilizers (ton/hectare)	0.0012 ^{III}	World Bank (2020). World Bank Data.	1.52 ^{III}	National Bureau of Statistics of the People's Republic of China (2019). China Statistical Yearbook 2018. World Bank. (2018). World Bank Data.
Pesticide consumption (kg/hectare)	2.2 ^v	_	85 ^v	

Continued

Oonlinded				
Indicator	Target Value	Source	Worst Value	Source
Effective utilization coefficient of irrigation water	0.6^{v}	_	0^{v}	_
Water consumption per 10,000 yuan of GDP (cubic metre/10,000 yuan)	48 ^{II}	State Council of the People's Republic of China (2021), The Outline of the 14th Five-Year Plan (2021-2025) for National Economic and Social Development and the Long-Range Objectives Through the Year 2035.	263.34 ^{IV} 198.40 ^{IV}	National Bureau of Statistics of the People's Republic of China (2019). China Statistical Yearbook 2018. National Bureau of Statistics of the People's Republic of China (2023). China Statistical Yearbook 2022.
SDG13: Climate Action				
Number of deaths and missing persons attributed to disasters per 100,000 population (per 100,000 person)	$0^{\rm v}$	_	221.508 ^{III}	United Nations Statistics Division. (2021). Our World in Data.
Greenhouse gas emission intensity per 10,000 yuan of GDP (kg/10,000 yuan)	99.85 ^{III}	World Bank (2020). World Bank Data.	2,689.10 ^{III}	World Bank (2016). World Bank Data.
Coverage of education and publicity activities on climate change for primary and secondary school students (%)	100 ¹	United Nations (2015), The 2030 Agenda for Sustainable Development.	$0^{\rm v}$	_
Share of non-fossil fuels in primary energy consumption (%)	25 ^{II}	State Council of the People's Republic of China (2021), Action Plan for Carbon Dioxide Peaking before 2030.	$0^{\rm v}$	_
Percentage of newly added new energy vehicles to newly added vehicles (%)	40 ^{II}	State Council of the People's Republic of China (2021), Action Plan for Carbon Dioxide Peaking before 2030.	$0^{\rm v}$	_
Percentage of green buildings to new buildings (%)	$100^{\rm v}$	_	$0^{\rm v}$	_
SDG15: Life on Land				
Forest coverage rate (%)	60.97 ^{II}	National Development and Reform Commission of the People's Republic of China & Ministry of Natural Resources of the People's Republic of China (2020). Master Plan for Major Projects for the Protection and Restoration of National Important Ecosystems (2021- 2035).	0^{v}	_
Percentage of nature reserves area to jurisdiction area (%)	15 ^v	_	$0^{\rm v}$	_
Ecological quality index (EQI)	75 ^v	_	$20^{\rm v}$	_
SDG16: Peace, Justice and Strong	Institution	s		
Number of victims of intentional homicide per 100,000 population (per 100,000 person)	0^{v}	_	38 ^{III}	Bertelsmann Stiftung and Sustainable Development Solutions Network (2018). SDG Index and Dashboards Report 2018.
Coverage of public legal service stations at the township (street) (%)	100°	_	0 ^V	World Bank. (2021). World Bank Data.
Disclosure rate of court trial process information (%)	100°	_	0^{v}	_
SDG17: Partnerships for the Goals				
International sister cities	20^{v}	_	$0^{\rm v}$	_
Total import and export as a percentage of GDP (%)	$40^{\rm v}$	-	0^{v}	-
General public budget revenue as a percentage of GDP (%)	14.6 ^{IV}	National Bureau of Statistics of the People's Republic of China (2023). China Statistical Yearbook 2022.	$0^{\rm v}$	_

- Note 1: I. Target value or worst value as defined by the 2030 Agenda for Sustainable Development
 - $II. \hspace{0.5cm} \textbf{Target value or worst value determined based on national planning target values/national standards;} \\$
 - III. Target value or worst value determined using the average of the corresponding data for the top five countries with the best performance on the indicator, as reported officially by the United Nations and other international organisations, such as the Organization for Economic Cooperation and Development and the World Bank;
 - IV. Target value or worst value determined using the average value of corresponding data for the top five provinces/cities with the best performance in this indicator in China's official statistical reports;
 - V. Technical optimum or technical minimum: when the determined target value or worst value is not convenient for directly indicating the assessment results of the indicator, the optimum or minimum value is technically processed based on the method determined above.
- Note 2: "—" means that the value is the result of a technical process without source labeling.
- Note 3: ND means the data is not disclosed.

Appendix 2 2017-2022 Lincang's SDG Indicator Data

Triple and the second	<u> </u>						
Sustainable Development Assessment Indicators	Unit	2017	2018	2019	2020	2021	2022
SDG1: No Poverty							
Incidence of poverty	%	5.05	0.81	0	0	0	0
Percentage of urban residents entitled to minimum living allowance	%	3.68	3.30	2.52	2.24	2.11	1.90
Participation rate of basic medical insurance	%	95.57	95.72	95.25	95.60	95.87	102.38
SDG2: Zero Hunger							
Underweight rate among children under-five	%	2.63	1.43	1.48	1.77	1.68	0.92
Agricultural labour productivity	10,000 yuan/person	2.72	2.14	3.61	4.22	_	_
Qualification rate of sampling inspection of edible agricultural products	%	99.90	99.90	97.40	97.82	97.35	94.09
Grain yield per unit area	kg / hectare	3,551.4	3,536.1	3,564.9	3,610.5	3,652.1	3,755.6
SDG3: Good Health and Well-Being		-		_	_	_	
Maternal mortality ratio	per 100,000 persons	19.97	19.08	16.29	8.95	10.35	24.20
Infant mortality rate	‰	7.16	6.41	5.70	5.28	4.66	3.93
Reported morbidity rate of notifiable infectious diseases	per 100,000 persons	214.56	194.61	197.43	161.93	179.54	190.65
Road traffic death rate	per 100,000 persons	9.44	7.72	8.70	6.38	7.44	3.92
Beds of health care institutions per 1000 population	bed/1,000 persons	4.77	5.13	5.52	6.23	6.58	6.76
Number of licenced physicians & physician assistants per 1000 persons	per 1,000 person	1.31	1.34	1.57	1.97	2.10	2.20
Vaccination rates under the National Immunization Programme for	%	93.22	93.88	95.65	95.82	96.20	96.80
eligible children				74.01	74.62		
	year of age	73.61	73.47	74.01	74.62	74.85	75.34
BDG4: Quality Education	0.	7.4.70	75.50	00.50	04.40		
·	%	74.70	75.56	88.59	91.42	92.04	93.02
, , ,	%	99.79	99.89	99.95	99.93	99.76	99.85
	%	93.48	94.72	97.88	98.65	98.99	99.04
, ,	%	97.14	99.89	99.89	99.95	99.70	99.95
Student-teacher ratio in primary education		15.00	15.00	16.00	16.00	16.20	15.30
Student-teacher ratio in junior secondary education		16.00	17.00	17.00	16.00	13.90	14.10
People with a junior college degree or above per 100,000 persons	per 100,000 persons	_	_	_	7,237	_	_
Average schooling years of working-age population	year	10.2	10.3	10.4	10.5	10.6	10.7
Adult illiteracy rate	%	0.050	0.020	0.020	0.008		_
SDG5: Gender Equality							
, , , , ,	%	99.78	99.89	99.96	99.94	99.79	99.88
 Proportion of seats held by women in the Municipal People's Congress and the Chinese People's Political Consultative Conference 	%	35.28	35.90	35.70	35.40	34.63	38.80
Percentage of women in civil servants	%	34.93	35.08	35.02	35.18	35.10	35.79
SDG6: Clean Water and Sanitation							
Coverage rate of rural population with access to tap water	%	79.11	83.36	89.43	91.15	83.40	84.60
Coverage rate of rural population with sanitary toilet	%	26.00	34.00	32.50	55.30	60.90	67.84
Compliance rate for centralized drinking water source quality in cities	%	100	100	100	100	100	100
Proportion of surface water of Grade III or better quality	%	100	100	100	100	100	100
	%	91.00	93.02	94.57	99.17	99.82	99.90
SDG7: Affordable and Clean Energy							
	%	100	100	100	100	100	100
·p· ·· · ·	%	91.21	92.10	89.92	90.79	89.34	92.67
	ton/10,000 yuan	ND					
	%	ND					
	%	60.85	56.45	54.91	57.06	53.93	57.53
SDG8: Decent Work and Economic Growth							200
	yuan/person	22,995	26,563	29,926	36,213	40,458	44,723
							44,723
	yuan	39,045	40,603	44,004	51,737	65,000	_
	yuan	5,565.67	6,196.67	6,839.58	7,566.92	7,611.17	-
	%	3.67	3.47	3.25	3.56	3.53	3.49
Deaths in safety production accident per 100 million yuan GDP	person	0.061	0.025	0.154	0.108	0.083	0.044
SDG9: Industry, Innovation and Infrastructure							

nnti		

Continued	Unit	2017	2010	2010	2020	2021	2022
Sustainable Development Assessment Indicators Ratio of total Research and Experimental Development (R&D) expenditure	Unit	2017	2018	2019	2020	2021	2022
in GDP Full-time equivalent of Research and Experimental Development (R&D)	· -	0.40	0.37	0.37	0.30	0.28	_
personner per 10 mousand persons		16.10	15.41	17.38	20.89	20.79	_
Proportion of output value of high-tech industries above designated size to total industrial output value above designated size	%	2.20	2.22	1.17	1.02	1.01	0.77
Invention patents per 10,000 people		0.29	0.30	0.31	0.32	0.44	0.57
Mobile phone popularization rate	%	85.23	92.77	100.55	102.81	118.00	123.51
Towns and townships have access to highways of Grade III or above	%	45.00	45.00	46.75	46.75	52.00	57.00
Popularization rate of household with fixed internet broadband access	%	50.10	68.28	80.86	69.80	87.85	93.97
SDG10: Reduced Inequalities							
Urban and rural income ratio	%	2.55	2.52	2.48	2.40	2.38	2.30
Engel coefficient of urban households	%	32.0	31.3	31.1	33.6	34.1	35.4
Engel coefficient of rural households	%	37.2	35.9	35.7	38.3	38.2	38.1
Minimum living allowance in urban areas	yuan/month	520	600	660	690	690	732
Minimum living allowance in rural areas	yuan/month	275	300	360	385	410	460
SDG11: Sustainable Cities and Communities	_	-				-	-
Proportion of expenditure for housing security to the general public budget	%	6.80	5.30	6.11	5.31	6.48	5.48
expenditure of local governments Length of public transportation lines per 100,000 persons	km/100,000 persons		82.78	37.76	162.82	166.67	154.21
Coverage rate of municipal domestic waste sorting service in communities	%		_	_		_	91.09
	microgram / cubic	10	00	01	26	00	
PM _{2.5} annual average concentration	metre	19	23	31	26	28	24
Proportion of days with good air quality in urban area	%	98.1	98.4	97.8	99.5	98.1	98.9
Area of public recreational green space per capita	square metre/person	10.58	10.61	9.99	10.54	11.27	12.04
Percentage of areas under the sponge cities' construction requirements in built-up area	%	19.45	21.95	23.42	27.83	31.65	35.35
DG12: Responsible Consumption and Production							
Safe disposal rate of industrial hazardous wastes	%	100.00	100.00	100.00	100.00	88.14	_
Rate of domestic garbage harmless treatment in rural area	%	96.74	98.54	99.18	99.80	51.60	62.29
Procurement scale of energy-saving and environmental-friendly products as a proportion of the procurement scale of similar products	%	93.37	97.35	80.65	97.90	98.06	91.68
Integrated reuse ratio of common industrial solid wastes	%	90.04	73.27	73.88	85.44	83.86	84.00
Consumption of chemical fertilizers	ton/hectare	0.148	0.146	0.142	0.297	0.290	0.283
Pesticide consumption	kg/hectare	1.50	1.50	1.50	1.50	1.50	1.50
Effective utilization coefficient of irrigation water		0.463	0.465	0.473	0.483	0.492	0.500
Water consumption per 10,000 yuan of GDP	cubic metre/10,000	132.7	127.3	123.6	121.3	99.2	96.6
SDG13: Climate Action	yuan		12.12				
Number of deaths and missing persons attributed to disasters per 100,000	400.000	0.450	0.457	0.457			0.404
population	per 100,000 person	0.158	0.157	0.157	0.236	0	0.134
Greenhouse gas emission intensity per 10,000 yuan of GDP	kg/10,000 yuan	ND	ND	ND	ND	ND	ND
Coverage of education and publicity activities on climate change for primary and secondary school students	%	100	100	100	100	100	100
Share of non-fossil fuels in primary energy consumption	%	40.41	45.36	44.56	53.44	55.19	_
Percentage of newly added new energy vehicles to newly added vehicles	%	0.2	0.6	0.7	1.1	3.0	7.4
Percentage of green buildings to new buildings	%	35.2	68.8	51.8	56.5	68.0	86.0
SDG15: Life on Land							
Forest coverage rate	%	65.55	66.72	68.48	70.20	57.83	57.83
Percentage of nature reserves area to jurisdiction area	%	8.65	8.65	8.65	8.65	8.65	8.65
Ecological quality index (EQI)		75.09	74.90	74.06	73.68	70.44	71.93
DG16: Peace, Justice and Strong Institutions							
Number of victims of intentional homicide per 100,000 population	per 100,000 person	1.25	0.78	0.48	0.27	0.40	0.36
Coverage of public legal service stations at the township (street)	%	_	_	85	100	100	100
Disclosure rate of court trial process information	%	_	85.40	93.42	97.92	98.45	99.82
SDG17: Partnerships for the Goals							
International sister cities		4	4	4	4	4	4
	0/		8.32		6.68	3.99	4.06
Total import and export as a percentage of GDP	%	8.73	0.32	8.48	0.00		

Note 1: "—" means data is missing.

Note 2: ND means data is not disclosed.

Appendix 3 Figures in the Report

Figure 1.1	Introduction to Lincang City	2
Figure 1.2	Location of Lincang City	3
Figure 2.1	The Process of the Implementation of the UN Sustainable Development Goals: Lincang's Voluntary Local Review 2023	13
Figure 3.1	Schematic diagram of the selection process of Lincang sustainable development assessment indicator system	20
Figure 3.2	Lincang City's Roadmap for Implementing the 2030 Agenda for Sustainable Development	23
Figure 4.1	Sustainable development vision and key task areas of Lincang City	34
Figure 4.2	Key construction projects in the Construction Plan (2018-2020) align with SDGs	35
Figure 4.3	Key construction projects in the Construction Plan (2021-2025) align with SDGs	35
Figure 4.4	On December 18, 2017, Lincang's celebrated the official opening of its first highway section	40
Figure 4.5	The launching ceremony of Lincang Station of China-Myanmar New Corridor was held at Lincang Railway Station on August 25, 2021	41
Figure 4.6	Appearance of the joint inspection building at Mengding Qingshuihe Port (left), and the service window of the border trade cooperative (right)	41
Figure 4.7	Dayakou Hydropower Station in Zhenkang	44
Figure 4.8	Residents take part in rural tourism and enjoy a healthy life	44
Figure 4.9	Intangible cultural heritage programmes and representative inheritors	48
Figure 4.10	Characteristic traditional villages such as Mangtuan Village of Mengding Town of Gengma County (left) , and Wanyao Village of Boshang Town of Linxiang District (right)	48
Figure 4.11	The water-sprinkling dance song "UP Gengma" created by the Gengma Autonomous County Ethnic Song and Dance Troupe	49
Figure 4.12	The "fire-pit publicity squad" explains national policies in villages.	49
Figure 4.13	Yield measurement and acceptance of high-yield and high-quality oilseed rape under the project of integrated research and demonstration of key technologies for high-quality development of oilseed rape industry in Linxiang District	52
Figure 4.14	Inside view of tea tree seedling breeding base under the project of key technology research and equipment research and development of tea industry's quality and efficiency improvement	52
Figure 4.15	Activities of the Science and Technology Week in Lincang	52
Figure 5.1	Lincang's performance by SDG	50
Figure 5.2	Lincang's scores of SDGs indicators in 2022	57
Figure 5.3	Dynamic monitoring and precise assistance to prevent poverty-stricken individuals from relapsing in Anye Village, Shanjia Township, Cangyuan Autonoous County	63
Figure 5.4	Aerial view of Ze'an New Village, Hepai Township, Gengma Autonomous County	63
Figure 5.5	Yang Tao, working at Linxiang District E-commerce Service Centre, is promoting different categories of Lincang alpine tea in the livestreaming studio	64
Figure 5.6	Product display at the e-commerce public service centre of Linxiang District Bureau of Commerce	64
Figure 5.7	Training of De'ang intangible cultural heritage clothing making skills was carried out in Baiyan village of Zhenkang County	65
Figure 5.8	Tea picking at the organic tea plantation at Mangpang Village, Mengdong Town, Cangyuan Autonomous County	65
Figure 5.9	Sci-tech specialist Zhang Dongcheng is guiding villagers to transplant fruit trees	69
Figure 5.10	The walnut production line	69
Figure 5.11	Li Changmei, a village doctor at Anle Village Health Clinic, Maolan Town, Yun County, is using the medical information service platform	74
Figure 5.12	Yang Binghong, a national grassroots famous veteran Chinese medicine expert, is teaching remotely over the Internet through an information system	74
Figure 5.13	Yulong Community's residents are in the health centre and community canteen	75
Figure 5.14	Yang Xinmei and her husband are using barrier-free facilities at home in Wenhua Community, Linxiang District, Lincang City	75
Figure 5.15	Township primary schools held seminars to improve teaching skills	80
Figure 5.16	Students of the football experimental class in Mengdong Town Central Complete Primary School conduct daily training	81

Figure 5.17	Teacher Chen Yuanchun is explaining the coding methods in the primary programming class in Mengdong Town Central Complete Primary School	81
Figure 5.18	"Silver Age" teachers observe a class in Cangyuan Va Autonomous County Ethnic Primary School	81
_	Launch ceremony of the "Silver Age work team" to Cangyuan Va Autonomous County Ethnic Primary School and Mengdong Town Central Complete Primary School	81
Figure 5.20	Lahu ethnic women from Nanmei Township in Linxiang District participating in grassroots election	85
Č	"Chong-Xiang Sisters' Micro Home" in Qinghua Community, Mangpan Street, Linxiang District,	85
riguic 3.21	conducting cultural heritage activities on the Dai ethnic elephant-foot drum making	0.5
Figure 5.22	Handwashing facilities in public places with promotion signs	89
Figure 5.23	On-street public toilets in Qinghua Community, Linxiang District, equipped with handwashing facilities and promotion materials	89
Figure 5.24	Yun County integrates the development of the photovoltaic industry with characteristic agriculture	93
Figure 5.25	View of Xiaowan Hydropower Plant	93
Figure 5.26	"Moh Nin Hei" Festival (Face-Smearing Festival), Cangyuan Va Autonomous County	97
Figure 5.27	Rural environment of Erdaohe village, Jingzhulin village, Fengshan Town, Fengqing County	97
Figure 5.28	Inside and outside scenes of the Dali-Lincang Railway	101
Figure 5.29	The technician is analysing experimental data in the Germanium Materials R&D Laboratory of the High-tech Zone	101
Figure 5.30	Advocacy of policies supporting ethnic minority development	105
Figure 5.31	Blind masseur Li Huacang demonstrates and explains massage techniques to visually impaired students	105
Figure 5.32	Bee farm in Banhong Village, Banhong Township, Cangyuan Autonomous County	109
Figure 5.33	The planning group of Mingwangshi Natural Village, Dongshan Village, Fengshan Town, Fengqing County, is discussing the development plan with the local residents	109
Figure 5.34	Yulong Lake in Linxiang District	110
Figure 5.35	The smart security module of Yulong "Smart Community" data centre	110
Figure 5.36	Zhenkang (China) - Kokang (Myanmar) "Ashuse" folk song competition, August 20, 2023	111
Figure 5.37	Zhenkang County "Ashuse" singing team activity	111
Figure 5.38	Product of construction waste resource utilization by the new green environmental protection material production enterprise	115
Figure 5.39	Production workshop of comprehensive utilization products of sugarcane residues	115
Figure 5.40	Urban Landscape of Linxiang District, Lincang City	119
Figure 5.41	Hydroelectric and photovoltaic power infrastructure	119
Figure 5.42	Ancient tea tree and its identification label	123
Figure 5.43	The macadamia nut plantation	123
Figure 5.44	The Asian elephant population in Nangun River Basin is slowly recovering	124
Figure 5.45	Lancang River Basin in Lincang territory	124
Figure 5.46	Staff from the Nangun River National Nature Reserve Management and Conservation Bureau presenting plant specimens within the reserve	125
Figure 5.47	Wildlife species in Lincang City	125
Figure 5.48	"Lincang without Lawsuits" platform in action: users engaged in online dispute resolution and judicial processes	129
Figure 5.49	Staff conducting legal publicity to all ethnic groups	129
Figure 5.50	The opening ceremony of the fourth Myanmar (Lashio) - China (Lincang) border trade fair in Nay Pyi Taw, Myanmar, May 25, 2023	132
Figure 5.51	Myanmar workers coming to China processing their paperwork at the immigration service hall of Mengding Qingshuihe Port	132
Figure 5.52	On April 12, 2023, the China-aided Kunlong Bridge in Myanmar was successfully connected	133
Figure 5.53	Farewell ceremony for the special train carrying migrant workers under the Shanghai-Yunnan labour cooperation	133
Appe	ndix 4 Tables in the Report	
Table 4.1	Performance of Sustainable Development Indicators of Lincang City	32
Table 4.2	Key tasks areas, detailed descriptions, and key actions and projects for sustainable development of Lincang City	37
Table 5.1	SDG index and dashboard of Lincang City from 2017 to 2022	58





































