

China Rolls Out Urban Infrastructure Blueprint

By LI Linxu

As China's urbanization gains momentum, urban infrastructure plays an ever-increasing role in modern city life.

To keep up with people's expanding needs for a better city life, a new urban infrastructure construction plan was released recently by the Ministry of Housing and Urban-Rural Development and the National Development and Reform Commission.

By 2025, the systematization level, operation efficiency, and risk prevention capabilities of urban infrastructure will be markedly improved, according to the plan.

It vows to solve the problems of big cities and make up for the short board of infrastructure in small-medium cities.

By 2035, a modern urban infrastructure system that is systematic, sound, efficient, smart, green, safe and reliable will be established, said the plan.

By then, its overall quality, operation efficiency, and service and management level is expected to be on par with international advanced levels.



Ping'anli Station in the Line 19 of Beijing Subway starts trial operation from July 30, 2022. (PHOTO: VCG)

Systematic, quality, green, low carbon, resilient and smart are the key words for the construction of urban infrastructure.

By 2025, green communities will ac-

count for 60 percent of the total, according to the plan, setting up a series of key development indicators.

As to information infrastructure, 5G deployment is high on the agenda.

The 5G user penetration rate in cities is poised to surpass 56 percent by 2025.

In recent years, significant achievements have been made in the country's urban infrastructure construction.

Statistics show that China's urban road length has reached 493,000 km in 2020, a 35.1 percent growth from that of 2015.

And more roads are on the way. The density of road networks will reach 8 km/square km, up 0.93 km/square km from the 2020 level, as per the plan.

The plan is a follow-up policy to the *Outline of the 14th Five-Year Plan for the National Economic and Social Development and the Long-Range Objectives Through the Year 2035*.

Key tasks are laid out in the construction plan, such as coordinating construction planning, boosting supply capacity, enhancing safety and resilience, improving operation efficiency, advancing co-construction and sharing, and speeding up digital upgrades.

Major campaigns will also be carried out to improve the quality of urban infrastructure, including transportation, water systems, and environment.

Case Study

Yunnan Pools Resources to Protect Endangered Monkey

By ZHAO Hanbin and ZHONG Jianli

The Yunnan snub-nosed monkey, like the giant panda, is known as China's "national treasure," and is a national first-class protected animal on the endangered species Red List of the International Union for Conservation of Nature (IUCN).

To protect this endangered species, in 2019, Yunnan Provincial Bureau of Forestry and Grassland, Yunnan Green Environment Development Foundation, The Nature Conservancy (TNC), and other 10 institutions launched the Yunnan Snub-nosed Monkey Range-wide Conservation Network (YSMRCN), trying to build a joint protection mechanism that involves multiple parties.

From patrol monitoring and habitat restoration, to community and public participation, YSMRCN is committed to the sustainable growth of the Yunnan snub-nosed monkey and the overall improvement of its habitat and ecosystem.

After three years of development, YSMRCN now has 28 members, and has invested more than 40 million RMB in the conservation work.

In 2021, the first Yunnan snub-nosed monkey field scientific observation and research station was established in Yunling Provincial Nature Reserve. An area of 5,326 mu (355 hectares) of habitat vegetation for the ani-

mal was restored, and a total of 540,000 trees including the spruce, fir and Huashan pine were planted. In the same year, YSMRCN was selected as a "typical case of ecological restoration in China" by COP15.

Through constant efforts during the past 40 years, the number of Yunnan snub-nosed monkey groups has increased from 17 to 24, and the number of individual monkeys has increased from less than 2,000 to more than 3,800. Meanwhile, the primary threat factors for the endangered species has changed from hunting and habitat loss to habitat fragmentation.

To further promote the protection of the species and strengthen exchanges between members, the third meeting of YSMRCN was held in Dali city, Yunnan province earlier this August.

Experts at the meeting had in-depth discussions on various topics, including the scientific patrolling and surveillance, and habitat restoration for the endangered species.

Zhang Shuxia, deputy director of the Institute of Eastern Himalayas Biodiversity Research of Dali University, which is the second rotating chair of YSMRCN, said it is urgent for all members to carry out standardized monitoring, management and protection of Yunnan snub-nosed monkeys, and encourage more social participation in the work.



Yunnan snub-nosed monkey. (PHOTO provided by Yunnan Provincial Bureau of Forestry and Grassland)

Internet-based Platform Helps Create Age-Friendly Society

By ZHONG Jianli

With the growth of its aging population, China has been making efforts to create an age-friendly society where elderly people can live a happy and healthy life.

The country has been exploring innovative approaches to improving access to integrated medical and care services, including the establishment of an Internet-based health information platform. That's according to a recent guideline issued by the National Health Commission and 10 other departments.

According to statistics from China's National Bureau of Statistics, by the end of 2021, the population aged 60 and above had reached 267.36 million, accounting for 18.9 percent of the coun-

try's total population, of which those aged 65 and above were 200.56 million, accounting for 14.2 percent of the total. A prediction by China Population and Development Research Center showed that the population aged 65 and above will reach 221 million by 2025 and exceed 300 million in 2033.

The guideline noted it is necessary to take advantage of informatization to provide better services. Relying on the national health information platform, a national health information management system for the elderly and a national elderly care service information system should be established, in order to know the health and care status of the elderly, thus offering relevant services by grades and categories.

The development of the smart

health and elderly care industry should be promoted. Health management, elderly health care monitoring, rehabilitation aids, and digitalized traditional Chinese medicine products, as well as home service robots should be developed to meet the medical and care needs of the elderly, as per the guideline.

Aiming to further promote the integrated development of medical and care services for the elderly, the guideline calls for the development of home- and community-based medical and care services.

On one hand, qualified medical and health institutions are encouraged to provide home medical services for elderly people with disabilities, chronic diseases, and so on. The "Internet plus healthcare and nursing services" will be advanced to offer more convenient

home medical services for the elderly in need.

On the other hand, community-based medical and elderly care services should be enhanced. Qualified community health service institutions, township health centers and other institutions should use available resources to renovate and expand their facilities, so as to provide integrated medical and care services.

The implementation of contracted family doctor services (CFDS) is also an effective way to provide convenient services for the elderly. The CFDS for the elderly should be steadily increased. Local governments can design personalized CFDS packages to further improve the accessibility of home medical services, according to the guideline.

Deeper Management Reform of National Sci-tech Programs

By LI Linxu

With the country's spending on R&D on the rise, the corresponding

management system is always in the spotlight, particularly in the field of national sci-tech programs.

Focusing on the management of

such programs, a notification was recently released by the Ministry of Science and Technology, the Ministry of Finance, and the National Natural Science Foundation of China.

To optimize the allocation of sci-tech resources and create a more favorable environment for innovation, the notification laid out a series of requirements and concrete measures on the application and approval of national sci-tech programs.

It is a follow-up policy to the *Plan to Deepen the Management Reform of Central Fiscal Sci-tech Programs* released in 2014, and the *Opinions on Further Promoting Scientists' Spirit and Strengthening Work Style* released in 2019.

For the projects of national sci-tech programs, such as national key R&D

projects, national natural science fund projects and major sci-tech instrument R&D projects, a joint review mechanism will be set up to prevent repetitive applications and approvals, according to the notification.

In principle, the number of such projects that a project leader or key member can apply for or undertake should not exceed two during the same period.

For special projects involving major sci-tech instrument R&D, a project leader or key member can only apply for or undertake one.

The rule will be implemented from January 1, 2023, said the notification, emphasizing that relevant institutes or units should evaluate researchers based on their contribution, instead of the number of projects they undertake.



Chinese-built Railway Celebrates 5-year Operation in Kenya

From page 1

Meanwhile, an improved logistics efficiency brought by the SDR has promoted the connectivity and integration of East Africa.

It now takes eight hours to transport cargo from the port of Mombasa to Nairobi using the SGR, as opposed to more than one day through the century-old meter gauge railway.

Thanks to the SGR, Mombasa port is no longer congested, and Kenya's exports are seeing bigger volumes and more diversified products, said Mainga,

who estimated that the railway contributed two to three percent to Kenya's GDP.

The modern railway has injected vitality into the local economy as it brought knowledge, skills and technology, said James Siele, Kenya Railways Business, Commercial & Operations Expert-Team leader.

In the past five years, China has trained more than 1,700 Kenyan specialists in railway technology and management.

"We have benefitted immensely

from skills transfer, and our Kenyan people have been trained to operate the trains efficiently," said Siele.

Apart from development, the railway has made remarkable achievements in ecological protection. There was no evidence of any adverse impact on wildlife, said Kitili Mbathi, former director general of the Kenya Wildlife Service, who has carried out surveys along the railway line.

As the line traversed through several nature reserves in Kenya, great effort was taken to reduce its impact on the

natural environment and wildlife.

According to the animal migratory routes provided by Kenya, 14 wildlife channels were built along the line, some of which are up to seven meters high, to facilitate the passage of large animals such as giraffes. There are also 600 culverts and 61 bridges where animals can cross.

Marco Lambertini, director general at WWF International, praised Chinese companies for proving that infrastructure construction and operation can be environmentally friendly.

Reducing Energy Use, Increasing GDP

From page 1

Electromagnetic heating for tundish was achieved domestically for the first time. Practices in many steel companies proved that a rise of more than ten percent in energy efficiency was realized compared with that of imported equipment.

If these technologies and equipment were to be promoted across China, the potential energy saved annually could be 30 million tons of standard coal, with an estimated annual steel production of one trillion tons, said Guo.

In addition, technologies concerning waste heat recovery of dust-laden exhaust gas in industrial production were also developed by researchers from institutes and enterprises. More than 20 companies have adopted such technologies and saved standard coal of 450,000 tons for the past three years.

Tertiary industry cuts energy consumption

Expressways and ports are not lagging behind when it comes to energy saving.

Between Lushi and Siwan on the Sanxi Expressway in central China's Henan province, a ground source heat pump system was installed, saving 40 percent of energy. Energy saving lights

made up 47.7 percent of total lights in all the tunnels of this section of the expressway.

The ventilation in long tunnels was controlled in an intelligent way, with the power saving rate reaching between 20 and 30 percent. Distributed power supply was adopted as well to save energy.

After this section of the expressway started operation, it saved more than 9,000 tons of standard oil every year.

Dalian port in northeast China's Liaoning province pioneered energy saving. A new high efficiency system was adopted to reduce energy consumption in the circulation process of containers. Old motors and transformers that consumed excess energy were replaced.

Meanwhile seawater source heat pump technology was used in the buildings within the port. Seawater absorbs solar energy and geothermal power to generate heat supply in winter and cooling in summer. Compared with traditional air conditioning systems, such technology could reduce energy consumption by 30 percent.

Reducing energy consumption is one step towards a greener country, exploring renewable resources is another, and China remains committed to both.