

UNAIDS asks Chinese to produce drugs

The head of the Joint United Nations Programme on HIV and AIDS has called on China to boost prevention and control in Africa by encouraging the country's drugmakers to open production hubs on the continent.

Michel Sidibe, executive director of UNAIDS, said the central government should use the China-Africa Development Fund to mobilize key pharmaceutical companies to invest in manufacturing hubs covering many African countries, which will help create a "viable and sustainable" market.

At the same time, medicines for HIV and AIDS produced in China and used by Chinese should be prequalified by the World Health Organization for use in Africa, he added. "We need to create a policy space to make sure those products can be prequalified by the WHO. That is one of the major challenges for the African countries to have easy access to these medicines," said Sidibe, who also is under-secretary-general of the United Nations.

Shortages of drugs and grassroots healthcare workers pose a major challenge for the control and prevention of HIV/AIDS in Africa, he said, while China also has experience and knowledge in the field that can be passed on.

"Ninety-seven percent of the medicine consumed in Africa is from other continents," Sidibe said. "We are happy that we have a very good relationship with the Chinese."

President Xi Jinping proposed intensifying cooperation with Africa in a number of areas, including industrial development, agriculture, finance, poverty alleviation and healthcare, at the 2015 summit of the Forum of China-Africa Cooperation in South Africa.

According to a 10-point action plan, the central government will encourage Chinese enterprises to collaborate with Africa in drug research, development and production, and encourage them to produce drugs in Africa to aid the sustainable development of the local pharmaceutical industry.

Globally, countries are making unprecedented progress in the control and prevention of HIV. For the first time, the world has more people with HIV receiving treatment than people waiting for treatment, and for the first time, HIV transmission from mother to babies is under control.

Moreover, China is committed to improving public health services, Xi said, noting that government health expenditures have increased by 80 percent over the past 10 years, and that it is helping to provide wider access to health services.

High-speed rail trips get easier as network expands

Passengers can now reach most of China's major cities by bullet train, thanks to a network that includes linkages of a number of rail routes, as well as efficient major transfer hubs.



A high-speed train heads to Ulanqab from Hohhot in the Inner Mongolia autonomous region in August, marking the opening of the region's first high-speed railway. [Tang Zhe/For China Daily]

According to China Railway Corp, the national rail operator, direct high-speed train services have been arranged between cities with a large number of passengers, including Beijing-Kunming, Harbin-Shanghai and Chengdu-Guangzhou. Those direct services link big cities in different regions by taking more than one rail route.

Service between Dalian, Liaoning province, and Xi'an, Shaanxi province, involves eight high-speed rail routes that link 18 medium-size and large cities.

Running the network is no easy task. A high-speed rail route must not only carry out bullet train services running only on a single line but also on multiple lines.

The major transfer hub design allows easy transfers to other bullet trains. Passengers can make travel plans and buy connected tickets in advance. When they arrive at the transfer station, they can use a transfer gateway to board the next service, with no need to exit the gate and enter again. The major

transfer hub design offsets the lack of direct service in some areas, providing more convenient travel choices.

Lanzhou West station, the major transfer hub linking the Xinjiang Uygur autonomous region with the rest of China, is expected to receive more than 5,000 transfer passengers a day, said Wang Jian, the deputy head of the station. The Baoji-Lanzhou rail route opened in July, and Wang estimates daily passengers will reach 25,000. The route links Lanzhou with the high-speed rail network.

No direct service links Xinjiang with most cities beyond Lanzhou. A passenger from Beijing can take a direct service to Lanzhou and then transfer at Lanzhou West station to Xinjiang.

China's high-speed rail network has surpassed 20,000 kilometers, spanning all provincial level regions except Tibet and the Ningxia Hui autonomous region. Hub cities are scattered around the country and linked by the high-speed network.

The world's longest high-speed rail service in operation is the 2,760-kilometer Beijing-Kunming service, according to China Railway Corp. Beijing has a distinct spring, summer, fall and winter, whereas Kunming has been called "the spring city" because the weather never gets very cold.

Like the Beijing-Kunming service, departure and arrival cities are different, requiring a different model of bullet train to adjust to diverse local environment.

In the northeastern region's winter, when the lowest temperature can hit -40 C, bullet trains need to adjust. In the northwest region's deserts, featuring strong winds and sandstorms, such as along the Lanzhou-Xinjiang line, bullet trains have stormproof designs.

According to a plan released by the National Development and Reform Commission in July 2016, China will expand the high-speed rail network to 30,000 km by 2020, linking 80 percent of major cities. By 2030, the network will link all cities with populations of more than 500,000.

Riding China's rails

China's high-speed rail network stretched 22,000 kilometers as of 2016, accounting for 65 percent of the world's total high-speed railway.

The world's longest bullet train service reaches 2,760 kilometers from Beijing to Kunming, Yunnan province.

The world's longest continuous high-speed rail track reaches 2,298 kilometers between Beijing and Guangzhou, Guangdong province.

China is the only country with trains running at 350 km/h. Service on several Chinese lines have reached that speed, including Beijing-Tianjin, Beijing-Shanghai and Shanghai-Ningbo.

Chinese scientists planning jumbo launched rocket

A new solid fuel rocket, launchable from the Yun-20 transport plane is being developed by Chinese scientists, reports China Central Television (CCTV).

The Y-20, or Transport-20 is China's first domestically made jumbo air freighter, designed to be used as a workhorse by the Chinese air force. It's capable of carrying out various long-distance air transportation tasks involving both cargo and passengers. 47-meter in length, 15 meters high, and with a 50-meter wingspan, the Y-20 has maximum take-off weight of over 200 tons and a maximum payload of 66 tons.

In addition to being used as a transport plane, the Chinese air force makes it available as a test platform for new technology. According to experts at the China Academy of Launch Vehicle Technology (CALVT), they are developing a new solid fuel rocket which could be launched by the Yun-20 in flight, sending a 100-kg load into near-earth orbit. Military expert, Wang Mingliang, says it's also possible the Yun-20 will be used to carry drones in the future.

It's anticipated that the Yun-20 could be refitted as refueling plane carrying over 90 tons of fuel, as well as airborne early warning aircraft with larger radar and a cabin for passengers.

China's top procuratorate increases int'l judicial cooperation

China's Supreme People's Procuratorate (SPP) has signed more than 130 bilateral cooperation agreements and memoranda of understanding with 98 overseas judicial organs so far to improve handling of transnational crime.

China's membership of the United Nations Convention against Corruption has made it possible for the SPP to seek or offer judicial assistance in criminal cases with judicial organs in 175 countries and regions.

The SPP has been designated as one of the Chinese central authorities in 13 legal assistance agreements signed between China and foreign countries.

Since the 18th National Congress of the Communist Party of China in 2012, the SPP has signed 24 cooperation agreements, memoranda of understanding, and

plans with judiciaries in 19 countries and regions.

International cooperation has helped to fight corruption, terrorism, money laundering, internet and drug crime, according to the SPP.

Procuratorates have handled 632 international criminal cases since 2013.

China's science award looks to emulate Nobel Prize

The awarding ceremony of the second edition of the Future Science Prize, hailed as the "Nobel Prize of China", was held in Beijing on Saturday.

The Life Science Prize was awarded to Shi Yigong for his research on the structure of spliceosome, a substance which is crucial in gene expression.

The Physical Science Prize was then awarded to Pan Jianwei. Pan was the lead scientist of world's first quantum satellite launched by China last year, which marked a step closer to the country's goal of building an unhackable global communications network.

The Mathematics and Computer Science Prize was presented to Xu Chenyang for his contributions to birational algebraic geometry.

Each of the laureates won \$1 million.

The Future Science Prize was initiated in 2016 by a group of entrepreneurs and scientists, with a view to honor outstanding scientists who research on basic science and its application.

"The founding of the awards is aimed at encouraging more young scientists to work out of their curiosity and be dedicated to fields which require long-term efforts," said Li Kai, a computer science professor from Princeton University and a member of the Future Science Prize Committee.

Li added the research of the winners, which can be from any country, must be original, have global influence and long-term significance, and be completed in Chinese mainland, Hong Kong, Macao or Taiwan.