

The toilet revolution

President's call to upgrade the humble public potty will help rural people and also have an impact on tourism

By XINHUA

President Xi Jinping called on Nov 27 for continued efforts to upgrade the country's toilets as part of an ongoing "toilet revolution" campaign. But why has China started this campaign, and why has its top leader personally spoken out on this seemingly petty issue? Xi's latest instructions provide some answers.

To understand the issue better, it is necessary to look into what Chinese toilets were in the past and the far-reaching impact of the revitalization project.

Although China has become the world's second-largest economy, some toilets in poor rural areas are still little more than makeshift shelters surrounded by cornstalks, while others are open pits next to pigsties, leading to problems such as contamination and pollution from human waste.

While living standards in cities have drastically improved with China's stellar economic growth, more attention is needed to improve the living environment for the country's 600 million rural people.

That is why the government has invested significantly to build new toilets in the poorest parts of the country. From 2004 to 2013, the investment totaled 8.27 billion yuan (\$1.25 billion).

By the end of 2015, some 75 percent of rural homes had flush toilets or dry toilets with underground storage tanks that had walls, roofs, doors and windows, and were at least 2



A woman pushes a wheelchair with an elderly woman up a ramp to a public toilet in Suzhou, in East China's Jiangsu province, last year. YANG LEI / XINHUA

square meters in size.

But obviously it is not enough. China launched a "toilet revolution" nationwide in 2015 to make such facilities cleaner and more regulated.

As toilets are a part of everyday life and affect everyone, the Chinese government, which has promised to dedicate itself to the well-being of all citizens, must squarely face the problem.

During visits to rural areas, Xi has asked local residents about the toilets they use, and has stressed repeatedly that clean toilets for rural residents are important for building a "new countryside".

While China has rich tourism

resources, unhygienic toilet facilities at the country's tourist sites have long been a big put-off for visitors.

At a time when traditional economic growth drivers are losing steam, China has pinned its hopes on services, including tourism, as a new engine. Improving public facilities at tourist sites has become an urgent task.

The three-year toilet revolution launched in 2015 saw more than 20 billion yuan invested in installing or renovating 68,000 toilets at tourist sites, exceeding the target of 57,000 toilets.

For the next three years, authorities aim to add 47,000 toilets and

renovate 17,000, according to a plan released by the China National Tourism Administration (CNTA).

"Compared with the rapid growth of the tourism industry and people's increasing demand for better lives, the development of toilets is unbalanced and inadequate," said Li Jinzao, head of the CNTA. "Another three-year program is urgently needed."

China's domestic tourism industry earned about 3.9 trillion yuan in 2016, and the country plans to raise tourism revenue to 7 trillion yuan by 2020.

In recent years, there has been a frenzy among middle-class Chinese

to buy smart toilets during trips to Japan, even though many of these items are actually made in China.

Hoping to ride the wave of China's toilet revolution, many Chinese companies are making efforts to manufacture and market high-end products of their own.

According to a report by the China Household Electrical Appliances Association, the market size for China's domestic smart toilet sector has grown by 59 percent year-on-year to reach 3.1 million units in 2016.

But penetration is as low as 1 percent, meaning there is still an immense potential market in China, according to the report.

C919 cruises past another landmark

China's homegrown aircraft successfully starts tests to prove airworthiness

By ZHU WENQIAN

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The second test C919 aircraft, China's first domestically developed narrow-body passenger jet, made its debut flight on Dec 17, indicating the aircraft model is starting the prelude of large-scale experiments and test flights, its manufacturer said.

The flight took off at 10:34 am from Shanghai Pudong International Airport and returned at 12:34 pm, according to its manufacturer, Commercial Aircraft Corp of China (COMAC).

During the flight, the aircraft was examined for the performance of taking off, landing and the working status of various main systems and equipment. It was also inspected for the performance of the landing gear

and the navigation and communication systems.

COMAC said it would send six test aircraft on test flights, and complete more than 1,000 compliance tests. Another two aircraft will carry out ground tests, including static and fatigue tests.

So far, 785 orders from 27 customers throughout China and abroad have been placed for the C919.

"The successful flight of the second test aircraft is regarded as another milestone as it enters the airworthiness certification phase in China," said Lin Zhijie, an aviation industry analyst and columnist at Carnoc.com, one of China's largest civil aviation Web portals.

"Meanwhile, China and the United States have validated the regulatory standards of both countries. China

and Europe also are in the process of certifying the C919 under the China-European Union air safety agreement," he said. "We could say that the hindrances have been cleared up from the policy level, and the performance and reliability of the C919 aircraft itself will determine if it could get the airworthiness certificates from the US and Europe."

In November, the first prototype C919 test aircraft completed its first long-haul flight from Shanghai to Xi'an, in Northwest China's Shaanxi province.

In the next few years, the manufacturer said it would cooperate with the Aviation Industry Corp of China, and start intensive series of test flights at the testing bases in Yanliang, Shaanxi province, and at Dongying, in East China's Shandong province.



The second prototype of the C919, China's first domestically developed narrow-body passenger jet, takes off from Shanghai on Dec 17. The original prototype's first long-haul flight was in November. YIN LIQIN / CHINA NEWS SERVICE

Wu Yue, an assistant to the general manager of COMAC, said Yanliang serves as one of the most important flight-testing bases in China. Earlier, the ARJ21, the nation's domestic regional commercial aircraft, took about six years to complete test flights in Yanliang. The C919 is expected to take three years.

Lin said the C919's entry into the market is expected to be between 2020 and 2022.

"Apart from meeting flight safety standards, the fuel efficiency, maintenance costs and the comfort level of the aircraft should all be taken into consideration before it is put into use in the market."