

The Economist: How to clean up India's filthy cities

来源: iYuba 2024-12-24



英文 | 中英

Panjim, the capital of the Indian state of Goa, is known for its **pretty** churches and Indo-Portuguese homes. But 20 years ago it looked like any other Indian city: filthy. Some 1,500 community waste-collection bins overflowed with mixed rubbish. Their contents were dumped beside a nearby village, growing into a mountain of garbage. Eventually, in the monsoon of 2005, the trash-heap collapsed, sending refuse into homes. Revolted, villages revolted; the site was closed. City officials looked for another site but no one would take their waste.

潘吉姆是印度果阿邦的首府，以其美丽的教堂和印葡萄牙人住宅而闻名。但20年前，它和其他印度城市一样：肮脏。大约1500个社区垃圾收集箱堆满了混合垃圾。它们被倾倒在附近的一个村庄旁边，变成了一座垃圾山。最终，在2005年的季风中，垃圾堆倒塌，垃圾进入家家户户。叛乱，村民们反抗；该垃圾站点被关闭。市政府官员寻找了另一处垃圾站，但没有人愿意处理这些垃圾。

Panjim today is a very different place. The city **replaced** its system of bins **with** door-to-door collection. Blocks of **flats** must segregate their rubbish into wet (mostly, food) waste used for **compost** and **biogas**, and 16 categories of dry, including one just for coconuts. (Goans consume five to eight coconuts per person each month; the national average is less than one.) The state has a no-landfill policy.

今天的潘吉姆有了翻天覆地的变化。该市用挨家挨户收集取代了垃圾箱系统。公寓楼必须将垃圾分为用于堆肥和沼气的湿垃圾（主要是食物）和16类干垃圾，其中一类仅能装椰子壳。（果阿邦每人每月吃五到八个椰子；而全国平均水平每人每月吃不足一个椰子。）该邦实行垃圾不填埋政策。

It took time, political will, **carrots and sticks**, but by 2021 99% of the waste collected in Panjim was segregated at source, 80% was processed and 90% of streets efficiently swept, according to a report by NITI Aayog, a

government think-tank, and the Centre for Science and Environment (CSE), another think-tank in Delhi. A system born of crisis is today cited as an example of "best practices" for other cities to follow.

这需要时间、政治意愿、胡萝卜加大棒，但到2021年，潘吉姆收集的99%废物都在源头上进行了隔离，根据政府智囊团NITI Aayog和德里另一智囊团科学与环境中心（CSE）的一份报告，80%的垃圾得到了处理，90%的街道得到了有效清扫。今天，这个因危机而产生的系统被引用为“最佳实践”的典范，供其他城市效仿。

Yet these models remain isolated bright spots. Much of India is covered under a shroud of plastic bags, snack packets, drink bottles and organic and human waste. A fifth of the population has no waste collection. Piles of garbage fester at street corners and along main roads and railway tracks. The problem is becoming more urgent: urban India generated some 50m tonnes of municipal solid waste in 2021. That is likely to jump to 125m tonnes by 2031, according to CSE. "We have achieved rocket science but we are not able to achieve a three-bin system," laments Shobha Raghavan of Saahas Zero Waste, a waste-management firm.

然而，这些模型仍然是孤立的亮点。印度的大部分地区都被塑料袋、零食包、饮料瓶以及有机和人类排泄物覆盖。五分之一的人口没有垃圾收集。成堆的垃圾在街角、主要道路和铁路沿线溃烂。这个问题变得更加紧迫：2021年，印度城市产生了约5000万吨城市固体废物。据CSE称，到2031年，这一数字可能会跃升至1.25亿吨。“我们已经实现了火箭科学，但我们无法实现三箱系统，”Saahas Zero Waste的Shobha Raghavan哀叹道，它是一家垃圾管理公司。

As the quantity of rubbish grows, its nature and harms are changing too. Most of India's waste used to be organic. Now the share of non-biodegradable waste is climbing. India today has more consumer goods, and more people with more money to spend on those goods. The growth of e-commerce and food-delivery apps has led to a rising tide of packaging.

随着垃圾数量的增加，其性质和危害也在发生变化。过去，印度大部分都是有机垃圾。现在，不可生物降解垃圾的比例正在攀升。今天的印度拥有更多的消费品，更多的人有更多的钱可以花在这些商品上。电子商务和食品配送应用程序的发展导致了包装浪潮的兴起。

Rubbish is not just malodorous and unsightly. In cities it spreads disease and attracts vermin. In the countryside it contaminates the soil and pollutes water sources. And in many places without organised collection and processing, waste is simply burnt—or, in methane-emitting landfills, spontaneously combusts—exacerbating India's air-pollution crisis.

垃圾不仅仅是恶臭和难看。在城市中，它还传播疾病并吸引害虫。在农村，它污染了土壤和水源。在许多没有组织收集和处理的地区，废物只是被焚烧——或者，在排放甲烷的垃圾填埋场，自燃——加剧了印度的空气污染危机。

Under Narendra Modi, the prime minister, India has prioritised cleanliness. In 2016 the government framed national rules for the management of solid waste, which among other things mandated waste segregation. In late 2021 Mr Modi launched a new iteration of his government's flagship "Swachh Bharat Mission", or "Clean India Mission", which until then had mostly focused, with some success, on building toilets and eradicating open defecation. The newer programme's goal is to make all Indian cities garbage-free. The central government has earmarked 365 billion rupees (\$4.3 billion) for the effort.

在总理纳伦德拉·莫迪的领导下，印度优先考虑清洁。2016年，政府制定了固体废物管理的国家规则，其中包括强制实行废物隔离。2021年底，莫迪启动了政府旗舰“Swachh Bharat Mission”或“清洁印度使命”的新版本，在此之前，该组织主要专注于建造厕所和消除露天排便，并取得了一些成功。新计划的目标是使印度所有城市都无垃圾。中央政府已拨出3650亿卢比（43亿美元）用于这项工作。

The way to fix India's rubbish crisis is difficult but it is not complicated. The most important element is waste-sorting by homes, offices and shops. Cities should start with modest aims, asking for wet and dry segregation, before adding categories for recyclables and sanitary waste. Simple nudges, such as collecting different types of waste on different days, can help. Efforts to educate citizens and incentivise compliance must be consistent, too.

解决印度垃圾危机的方法很困难，但并不复杂。最重要的因素是家庭、办公室和商店的垃圾分类。城市应该先制定一个适度的目标，要求干湿隔离，然后再添加可回收物和卫生废物的类别。简单的推动，例如在不同的日子收集不同类型的垃圾，可以有所帮助。教育公民和激励合规的努力也必须一致。

All this requires political will. Goa was fortunate: its efforts to clean up have been supported by leaders of various political stripes. "Now for Goa, this is irreversible," says Sanjit Rodrigues, an official who has spearheaded the state's waste-management overhaul.

所有这些都需要政治意愿。果阿邦很幸运：它的清理工作得到了各种政治派别领导人的支持。“现在对于果阿来说，这是不可逆转的，”带头推动该州废物管理改革的官员桑吉特·罗德里格斯说。

But elsewhere in India "there is no political ownership of the agenda," says Srikanth Viswanathan of Janaagraha, an NGO. Elected officials in cities have limited power. At the level of states, politicians have little interest in something as unsexy as waste management. "I have not seen a single politician win or lose an election on the issue of garbage and sanitation," says Ankur Bisen, the author of "Wasted", a book about sanitation in India.

但在印度其他地方，“议程没有政治所有权”，非政府组织Janaagraha的Srikanth Viswanathan表示。城市民选官员的权力有限。在州一级，政客们对垃圾分类管理这样不太性感的事没有兴趣。《浪费》一书的作者安库尔·比森表示：“我还没有见过一位政治家在垃圾和卫生设施问题上赢得或输掉选举。”这是一本关于印度卫生设施的书。

India's biggest cities are the worst laggards. Mumbai mandated waste segregation in 2016. Today only about a quarter of its wet waste is properly sorted, says Mahendra Ananthula at Antony Waste, a firm that handles much of the city's rubbish. For an extremely dense city, with about half its population living in slums, "that's not a bad achievement," he says. But nor is it something to boast about.

印度最大的城市是最落后的城市。孟买于2016年强制实施废物隔离。Antony waste是一家处理该市大部分垃圾的公司，其Mahendra Ananthula表示，如今只有大约四分之一的湿垃圾得到了妥善分类。对于一个人口极其稠密、约一半人口生活在贫民窟的城市来说，“这并不是一项糟糕的成就，”他说。但也不是什么值得夸耀的事情。

Instead, it is smaller cities that are leading the way on waste management. They face less interference from state leaders and there is less resistance from politicians to giving them some autonomy. They "still have the ability to do better governance and are able to do this faster and better," says Sunita Narain, the head of CSE. Panjim and many other small cities have proved it is possible to clean up India. Until Mumbaiers and Bangaloreans demand better, they can only look on in envy.

相反，较小的城市在垃圾管理方面处于领先地位。他们面临的国家领导人的干预较少，政客对给予他们一些自主权的抵制也较少。CSE负责人Sunita Narain表示，他们“仍然有能力进行更好的治理，并且能够更快、更好地做到这一点”。潘吉姆和许多其他小城市已经证明，让印度变得干净是可能的。在孟买人和班加罗尔人提出更好的要求之前，他们只能羡慕地遥望。



00: 01 / 06: 36

赏 0

赞 0

踩 0

相关推荐

评论



查看更多及发表评论

