Rejuvenating Singapore River
Before the 1970s

The Singapore River was the city’s lifeline during the colonial era. As a focal point for trade and industry, it attracted numerous squatter settlements, street hawkers and farms. However, lack of regulation caused oil, debris and waste from cargo transfers, rotting bumboats and human activities to severely pollute the river. By the 1970s, the river was so unhygienic that the waters emitted a stench and was uninhabitable to marine life. This prompted a state-led intervention.

Rapidly urbanising cities in Asia need to balance the demands of population and economic growth, while tackling social, cultural and historical challenges. In this illustration, Yuqi Liew highlights three examples of successful urban regeneration—Singapore, Tokyo and Seoul—and the various strategies used that made a positive impact in their respective environments.
1977–1987

The clean-up of the river took a full decade. Rubbish was cleared and mud was dredged out of the river. To prevent further pollution, squatters, street hawkers and vegetable sellers were also relocated away from the river. In all, the clean-up operation cost S$300 million.

Present

Today, the Singapore River is a renewed hive of activity that resonates with its historical significance. The clean waterbody meanders along the historic Civic District, the Central Business District and hubs of entertainment and lifestyle attractions, all connected seamlessly through an extensive pedestrian network. Outdoor dining, ferry tours, water sports competitions and art installations keep the riverside vibrant throughout the year. The river is now part of Singapore’s largest and most urbanised reservoir, Marina catchment, which reflects the city-state’s savvy approach to capitalise on its water resources for economic, cultural and social purposes.
Tokyo Station, the main intercity rail terminal in Tokyo, has been an emblem of the capital’s modernisation and transit-oriented development. Built in 1914 in Marunouchi, Tokyo’s Central Business District, the station is also the symbolic gateway to the Imperial Palace though the historic Gyoko-dori Avenue. Through the years, Tokyo Station has suffered war damage and endured economic crises like the Japanese asset price bubble collapse and the 10-year economic stagnation known as the “Lost Decade”.

To restore the station to its original early 20th-century glory, major restoration works were undertaken in 2006. Costing almost ¥56.6 billion (S$680 million), the efforts reinstated the station’s brickwork and domed structures, and created a new gallery space. The Tokyo Station Hotel was reborn as a luxury historic hotel and the carpark, taxi and car transfer stops were also relocated to make way for a 6,500 m² public space, known as the Marunouchi Central Square. The restoration works completed in 2012 and the square opened in 2017.
Today, Tokyo Station is an important cultural landmark of Japan and an internationally renowned transportation hub. The Marunouchi Central Square weaves the building’s historical significance with daily life, allowing visitors and locals alike to reclaim the space once overrun by traffic. These enhancements have strengthened Marunouchi’s standing as a global business centre, attracting new investments to the district. Moreover, it cements Marunouchi’s status as a popular location for annual events such as the Marunouchi summer festival, Winter Illumination and the Tokyo Marathon.
Originally a stream flanked by urban squatters, the Cheonggyecheon [Korean for ‘clear stream’] was covered up and the Cheonggye Highway constructed over it in the late 1960s. Built to support Seoul’s rapid industrialisation and modernisation, the highway was a major transport artery that cut through downtown Seoul. Commuters relied heavily on it to get to the city centre, where it carried up to 170,000 vehicles per day at one point. Over time, congestion worsened and the central business district began to lose its competitiveness to the Gangnam district.

To revitalise the city centre and address safety concerns for the corroding highway, the Cheonggyecheon restoration project was initiated on 1 July 2002, when Mayor Lee Myung-bak took office. The entire highway was demolished and the stream was uncovered. To allay concerns of traffic disruption, public transport infrastructure was strengthened while the use of cars was also discouraged in the city centre. The project was completed under US$341 million (S$453 million).
The restoration project revived the 11-km-long stream, creating 163,000 m² of green public space. Air and water quality improved while noise levels were reduced. A wind corridor was also created and the Urban Heat Island effect in the area decreased by 3.6°C during the summer. These improvements attracted more private investments to the areas, which increased land values by 25–50% and created a new variety of uses in the downtown area.

Today, Cheonggyecheon has become an iconic landmark and a popular venue for cultural activities, hosting 259 events between 2005 and 2007 alone. The successful urban regeneration project exemplifies synergy between ecological restoration and improvements to quality of life for everyone.