

Delft University of Technology

Not just "Better City, Better Life"

Creating a sustainable urban legacy beyond World Expo 2010 in Shanghai

Chen, Yawei

Publication date 2020 **Document Version** Final published version

Citation (APA)

Chen, Y. (Author). (2020). Not just "Better City, Better Life": Creating a sustainable urban legacy beyond World Expo 2010 in Shanghai. Web publication/site, Bureau International des Expositions. https://www.bie-paris.org/site/en/focus/entry/not-just-better-city-better-life

Important note

To cite this publication, please use the final published version (if applicable). Please check the document version above.

Copyright Other than for strictly personal use, it is not permitted to download, forward or distribute the text or part of it, without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license such as Creative Commons.

Takedown policy

Please contact us and provide details if you believe this document breaches copyrights. We will remove access to the work immediately and investigate your claim.

This work is downloaded from Delft University of Technology For technical reasons the number of authors shown on this cover page is limited to a maximum of 10.

Not just "Better City, Better Life"

Creating a sustainable urban legacy beyond World Expo 2010 in Shanghai

May 2020

Not just "Better City, Better Life"



Yawei Chen

Assistant Professor in Urban Development Management, Department of Management in the Built Environment, Faculty of Architecture in the Built Environment, Delft University of Technology

In recent years, creating an urban legacy has gradually become the focus of event-led development or regeneration in cities. <u>World Expo 2010 Shanghai</u>, held under the theme "Better city, Better life" was organised to emphasise the concept of "city of harmony" and to promote the sustainable development of the city. The event itself is considered one of the most successful World Expos, attracting more than 200 international participants and more than 73 million visitors. But to what extent has Shanghai achieved its sustainable urban legacy?

Legacy research has become an important part in mega-event studies. It was first raised by the International Olympic Committee (IOC) to assess the longer impact of the Olympic Games on host cities, after witnessing how a mega-event could drastically transform host cities like Barcelona, an industrial city in the midst of a deep economic crisis. Host cities have the intention of creating a series of physical, economic and social benefits. These benefits include boosting the urban economy, permanently repositioning the city in the global tourist market, facilitating regeneration, allowing the revamping of transport and service infrastructures, creating a cosmopolitan urban image and vibrant cultural quarters, and establishing a network of high-grade facilities to serve as the basis for future bids.

On the other hand, host cities are often saddled with financial and management burdens after the event. Time pressure means that the balance between investment and post-event strategies is not always carefully considered. Besides underused facilities and empty event parks, host cities are often left with substantial debts and venue operating costs that take years to pay off. Cities thus need to carefully consider the kinds of impacts they would like mega-events to have on their urban environment and how best to exploit those events to create long-term positive impacts. The term legacy is thus defined as any net impact arising from a megaevent, for better or worse changes or transformation. Over the years, legacy consideration paid increasing attention to environmental and social issues. In 1994, environmental concern and the re-utilisation of Expo site was included in the Resolution of the General Assembly of the Bureau International des Expositions (BIE). In 2003, both legacy and sustainability were added to the mission statement by the IOC to ensure the environmental issues and long-term positive impact considered even before the mega event starts. Researchers nowadays speak of both tangible impact (venues or building, infrastructure development, new jobs and so on) due to mega events, which is the 'hard', 'proto-elements' of legacy, but also intangible impact or the 'human factors' (images, skills, experience, community identity and so on) that host cities endure in post-event era. Creating comprehensive legacy creation strategies to cover the whole development phases before, during and after events has thus become a gigantic task for host cities.

"The theme, 'Better City, Better Life', depicted Shanghai's vision of its future"



The banks of the Huangpu River during Expo 2010

Aspiring to become a Global City, Shanghai has mapped out an ambitious plan to build the city into an international economic, financial and trade centre. As the host city of World Expo 2010, the first event of its kind hosted in a developing country, Shanghai viewed the megaevent as a great opportunity to regenerate its waterfront along the Huangpu Riverbank into the host city's new cultural and exhibition agglomeration. Furthermore, Shanghai saw the opportunity to upgrade its cultural sector. The theme, "Better City, Better Life", depicted Shanghai's vision of its future: a new way of thinking, using new technology, and an innovative approach towards realising a thriving, eco-friendly urban environment. The Expo put Shanghai under global media attention and showcased the city as the go-to destination for world leaders, business executives, technology pioneers, celebrities and international as well as domestic tourists. With more than 200 countries and international organisations participating, the World Expo attracted 73 million domestic and foreign visitors. The success of Shanghai's event prompts us to ask a more intriguing question: Has Shanghai used the World Expo event to help achieve positive sustainable legacy for its host city? If so, what exact legacy has been created? In this paper, I will highlight four main areas in which the World Expo led to the creation of a positive sustainable legacy in Shanghai. They include the World Expo as the catalyst for urban restructuring process in Shanghai; the World Expo as a knowledge generator to transform the local planning regime; the World Expo as a trigger for

social progress; and the World Expo as the facilitator for regional integration in the Yangtze River Delta (YRD).

World Expo as a catalyst for the urban restructuring process in Shanghai

World Expos are mega-events that showcase the latest or future advances in the arts, cultures and technology of host cities. Over the years, World Expos have gradually grown into complex economic, political and planning events that last for three to six months and receive, in a short time span, millions of visitors from all over the world. As the first city from an emerging economy to host such a world event, Shanghai initially wanted to use its World Expo as a strong vehicle for city branding and to show off its achievements in city building and its rising status in innovation and cutting-edge technology. But when Shanghai started to prepare its project, the drive of using the Expo as a catalyst for urban restructuring became more prominent for city leadership. From the 1990s, Shanghai surprised the world with its rapid economic growth and physical transformation. Its urban transformation started with the less-developed but more spacious suburban Shanghai, such as the Pudong New Area on the eastern side of Huangpu River (the main river that separates Pudong from the Bund in the downtown Puxi area). Besides, various large-scale urban (re)development projects, such as the Bund area redevelopment, the People's Square redevelopment and the Hongqiao Business District development, have been strategically carried out to revitalise its inner city, infrastructure node and urban fringe. To accommodate new growth, Shanghai needed to look for new urban space for inhabitants, business and tourists, and the banks of the Huangpu River offered such space not far from the city centre. For a long time, only a three-kilometre stretch of the Huangpu waterfront could be accessed by the public, while most parts of the 113km waterfront were occupied by Shanghai's heavy industrial sectors, including China's most prominent shipyards, various harbour industries, steel factories, chemistry factories, etc. However, it was a daunting task to transform the industrial landscape. These harbour-related enterprises were state-owned under the administration of the central government, and the local development plan did not necessarily apply to them.

"Shanghai's World Expo preparations served as a catalyst to facilitate the urban restructuring process"



The shipyards on the banks of the Huangpu River in Shanghai, prior to Expo 2010



113km waterfront were occupied by Shanghai's heavy industrial sectors prior to Expo 2010

Shanghai was inspired by the idea to make use of the waterfront along Huangpu River as the Expo site, as the location could best reflect Shanghai's past, present and future development, and fit well the Expo theme. Because Shanghai obtained the right to host World Expo 2010, the city had the legitimacy to ask for coordination from the central government to persuade these powerful state-owned enterprises located within the Expo site to consider relocating to other more spacious location in suburban areas. There was a long negotiation between Shanghai and these enterprises on the relocation and compensation to reach an agreement. For example, Jiangnan Shipyard would relocate to the shipyard base on Changxing Island. In some cases, the time constraints of hosting the Expo obliged involved parties to suspend the dispute until afterwards. Through Expo preparations, the land value of the waterfront on both sides of Huangpu River increased substantially, making it more appealing to private investors after the Expo. Furthermore, the Expo created cultural facilities and necessary infrastructure including metro lines and an improved road system, meaning that the Expo site could be transformed into high-quality urban land with cultural and service-oriented urban functions in the post-Expo era.

At the city level, Shanghai's World Expo preparations served as a catalyst to facilitate the urban restructuring process, with a focus on the Huangpu River waterfront and the integration between Pudong and downtown Puxi. Even before China was awarded the right to host Expo 2010, the Shanghai Municipal Government established a project team in January 2002 to coordinate the development of the riverbank. Later, the Shanghai Huangpu Riverbank Development Group was established to coordinate the waterfront development of both banks of Huangpu River that belong to different urban districts. Meanwhile, a public company - Shanghai Shenjiang Riverbank Development and Construction Investment (Group) Ltd – was established to take charge of land development, finance and construction of the Huangpu Riverbank Development with public aims.



Extension of Hongqiao Airport ahead of Expo 2010 © Hao Wu



The revamped riverfront of the Bund © Another Believer

To invite new planning concepts and creative ideas in the preparation of the Expo site, the Shanghai Urban Planning Administrative Bureau organised a series of concept design competitions in 2000 and 2001 to redesign the 41.2km riverbank line and 91km2 waterfront area along the Huangpu Riverbank. A Master Plan for the waterfront area of the Huangpu Riverbank into the concepts provided by the winning team, SOM. The plan divided the Huangpu Riverbank into the central part, northern extension and southern extension. The central part covers 20km along riverbank line and an area of 22.6km2, including a 6.68km2 core area to prepare the Expo. There are five objectives defined in the Master Plan regarding the transformation of the Huangpu River waterfront:

- Functional reform: moving all docks, factories and warehouses on the banks and building a waterfront integrating housing, work, culture, recreation, tourism and other functions;
- Environmental protection: treating the industrial pollution and at the same time building greenbelts on both banks to improve biodiversity in the city environment;

- Improving quality of life and traffic conditions to allow a smooth connection between the waterfront areas and the city;
- Protecting the historical cultural heritage of the city with new urban functions;
- Reconstructing the space landscape of the city and coordinating the waterfront development of both banks of the Huangpu River in different urban districts.

Using the Expo as a catalyst, Shanghai gained the consensus of stakeholders and existing interest groups in transforming the Huangpu Riverbank waterfront with new urban functions for citizens to enjoy. To speed up waterfront transformation, Shanghai first issued the Huangpu Riverbank Waterfront Development Five-year Plan in 2013. This action plan identified seven districts on the Expo site and adjacent neighbourhoods with specific targets, including targets for a series of waterfront neighbourhoods outside of the Expo site in Xuhui and Yangpu Districts. Both districts further developed their own five-year plans to specify the measures on how to achieve the targets. These five-year plans demonstrated the determination of local leadership to carry out the plans and turn them into reality. Besides urban transformation, Expo preparations allowed the city to invest heavily in the infrastructure system, considered crucial to its global economic status. By the time the Expo opened, Shanghai had made great progress in its infrastructure system, adding five new metro lines, one new airport terminal, a myriad of new road tunnels under the Huangpu River, an improved road network and more than several square kilometres of prime urban area ripe for redevelopment. The 731 ha Xuhui Waterfront was one of the first mega projects to be rapidly developed, including a promenade, a museum, exhibition centres, large-scale residential districts and high-end office buildings. The location is well accessible via the newly-built metros, various city highways and tunnels and therefore attracted the participation of numerous investors and developers.



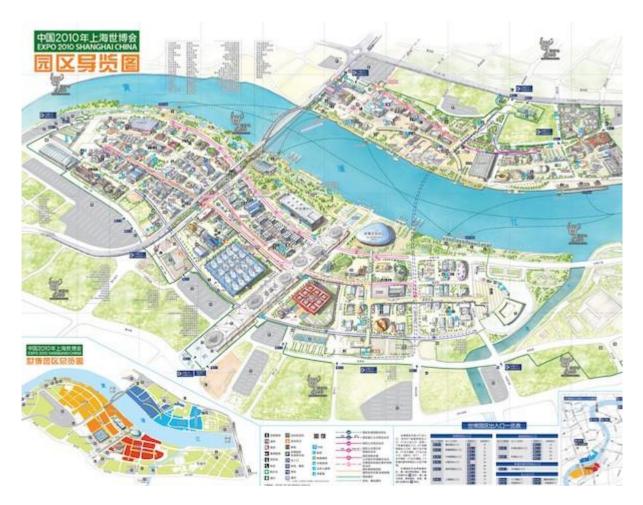
Shanghai's transport infrastructure was significantly boosted in the run-up to Expo 2010, with five new metro lines opening © Tim Adams



Ya'nan East Road Interchange, part of Shanghai's road network © Denys Nevozhai

World Expo as a knowledge generator to transform the local planning regime

While the legacy of mega-events is often discussed geographically, approaching event legacy as knowledge has increasingly gained ground. Host cities of the Olympic Games not only carried out research on legacies of the Olympic Games and local impact but also shared knowledge with each other to gain a better understanding of legacy creation in different local contexts. According to Oliveira et al, event host cities not only acquire "explicit knowledge, including technological and scientific knowledge", but also tacit knowledge obtained through experience. In many cases, host cities borrow expertise from previous host cities to ensure better legacy lessons are learned and adapted effectively to local legacy plan. As the host city of World Expo 2010 that was eager to learn and do well, Shanghai valued legacy lessons from previous host cities and therefore made extensive efforts to study the relationship between event and city development from previous Expo host cities. Among the studies, how to adopt new planning concepts, new planning methods and new technologies to create a sustainable legacy and high quality of living environment were high on the agenda.



To ensure the urban development strategies that would allow Shanghai to profit from the Expo, the Municipal Government's main think tank – the Shanghai Development and Reform Research Institute – and various local universities investigated various post-Expo effects on Shanghai's development towards a global city, including the development of its service sector, cultural sector, knowledge economy, regional integration, low-carbon economy as well as the reuse of post-event resources. The corresponding post-event strategies define steps on how to make use of land, create new urban functions, deal with Expo pavilions, create waterfront landscapes, and complete public facilities. Most of the research results were incorporated in the Master Plan of the Shanghai Expo site. Besides research, Shanghai organised two international design competitions in 2002 and 2004 to invite international architect studios to design the Expo site with creative ideas. This learning process continued in the post-event period, with various local think tanks and university researchers continuing to investigate thematic research for optimal post-event development, such as the development of the cultural sector.

Legacy plan

The important strategy used in the preparation of Expo 2010 Shanghai was to incorporate a legacy plan in the Expo site plan from the beginning. For the whole Expo site and each of the key Expo facilities, the Master Plan defines not only the basic principle of design but also their post-Expo use as well as strategies for operation and management. Main highlights include:

- The Expo plan is actually a Master Plan of the Expo site that incorporates temporary Expo preparation;
- Defining permanent buildings based on Shanghai's urban strategies to avoid demolishing temporary buildings;
- Conserving historical industrial buildings from their industrial function to cultural and exhibition functions;
- Combining the development of the road system, the metro system, other infrastructure facilities, green and public space for the Expo with the development of Huangpu Riverbank redevelopment to create a new urban centre on the Expo site on both sides of Huangpu River;
- Applying advanced ecological techniques for recycling water, renewable energy sources at the building, district and urban scales.

The Master Plan divided the whole area into five zones:

- Zone A: Pudong East Area (43 ha), planned for foreign pavilions during the Expo and to be transformed into an international cultural and business district;
- Zone B: Pudong Middle Area (96 ha), planned as the core of Expo site with a number of permanent buildings such as the Expo Cultural Centre, the Expo Theme Exhibition, the Expo News Centre, and to be transformed into an exhibition and business district;
- Zone C: Pudong West Area (103 ha), planned for pavilions, theme pavilions using existing industrial plants and the Houtan Wetland Park, and to be used for a reserved extension area;
- Zone D: Puxi Middle Area, (54 ha), planned as a transformation of the Jiangnan Shipyard site into corporate pavilions and a green area along waterfront, and to be transformed into the industrial exhibition centre, maritime museum, aquarium, for the purpose of exhibition and cultural exchange;
- Zone E: Puxi East Area, (15 ha), planned as a transformation of the Jiangnan Shipyard factories into various corporate pavilions. Reserved for extension in the post-Expo era.



China's Pavilion at Expo 2010, now the China Art Museum

To ensure the Expo preparation activities were coordinated in an effective and efficient way, the Shanghai 2010 World Expo Executive Committee was established, consisting of representatives from both central government and 24 related committees of the Shanghai government. The Shanghai World Expo Coordination Bureau was established as a core institution in charge of the daily operation and development of the Expo area, and to help implement national policies and the policies of the Shanghai World Expo Organizing Committee until its tasks ended in 2012. Besides, the Expo Land Company was established in January 2004 to take charge of land expropriation, land development and relocation. The Shanghai Shenjiang Riverbank Development and Construction Investment (Group) Ltd was then in charge of the Huangpu Riverbank except for the Expo site, in cooperation with the Shanghai World Expo Bureau. Thus, the preparation of the Expo, from land management to construction, were assigned to responsible entities to ensure a smooth process.

Post-Expo use of buildings

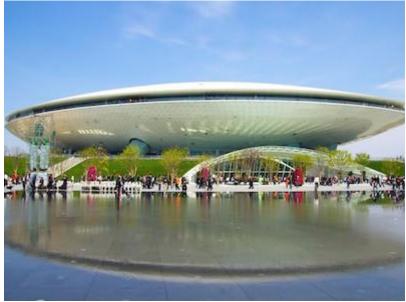
The event facilities could be divided into four categories. The first is permanent facilities constructed by the Expo Organiser (Table 1), to be retained after the event as part of future facilities for Shanghai, for example, the 20,000m2 China Pavilion, the 129,000m2 Theme Pavilion, and the World Expo Centre. The Expo Boulevard was built as the main access to the

site, destined to become a modern commercial corridor as well as tourist attraction. The Expo Village, on the other hand, was constructed to accommodate officials from participating countries and organisations before turning into a hotel centre. Besides, there were 150 pavilions belonging to other participant countries, non-governmental organisations or corporations. Many of them had been designed by world-famous architects to show off the creativity of the participating countries and thus received various prizes for their innovative architecture design. Additionally, Shanghai also subsidised the construction of temporary pavilions for 50 developing countries so they could also participate in the Expo.

Table 1: Main preserved build their post-Expo	
Expo facility	Post-Expo
China Pavilion	China Art I
Expo Axis	Infrastruct mall
Expo Cultural Centre	Addition o Mercedes-I
Expo Theme Pavilion, Expo News Centre	Addition o the Shangl Conference
Expo Pavilions	Keep pavili and transf business at exchange
Urban Best Practices Area	Shanghai (
Urban Future Pavilion (former Nanshi Electricity Plant)	Power Stat
Expo Enterprises Pavilions	China Indu
Expo Park	Urban Wat

In line with the legacy plan, the newly-constructed buildings as well as a number of transformed buildings, following revisions, were adapted to their new functions after the Expo and transferred to their new owners as planned. Most of the buildings serve as museums and exhibition centres with a mandate to open freely to the public. In the first few years after the Expo, the metro stations within and nearby the Expo site were closed due to nearby construction and limited passengers, which weakened the accessibility of these cultural facilities in Pudong. In comparison, the former World Expo Cultural Centre, which was converted to the <u>Mercedes-Benz Arena</u>, enjoyed exceptional commercial success. It provides live-music shows for up to 18,000 visitors throughout the year and its diverse cultural and sports activities also attract young people and families to visit. Besides the permanent buildings, hot debate in society focused on how sustainable principles could be applied so as to reuse the outstanding pavilions that were most appealing to the local Chinese population. As a result, Shanghai Municipality decided to keep a number of pavilions as they were for the following five years, pending ideas for their reutilisation. The Italian pavilion, for example, was transformed into an exhibition centre to showcase Italian arts.

"Shanghai made extensive efforts to study the relationship between event and city development from previous Expo host cities"



The Expo Performance Centre, now the Mercedes Benz Arena



Italy's Expo 2010 Pavilion, now a cultural centre

Despite extensive preparation of the legacy plan and legacy strategy, the post-Expo development still faced several bottlenecks. The first was a lack of a more detailed guidance for implementation, which slowed down the development of key areas on the Expo site. The second was the lack of coordination on the development of the Expo site between different urban districts, leading to the risk of having very similar urban functions without nuance and local identity. The third was the hesitation of the private sector to get engaged in the development of Expo site due to the limited power of changing planning concepts. Instead, they chose to develop urban districts adjacent to the Expo site. Furthermore, District Governments competed fiercely for investment, with the result that some waterfront locations were well developed at an early stage while others fell behind due to a lack of investment. Shanghai recognised these bottlenecks and made efforts to find solution. A series of design completions were arranged to invite innovative development concepts for the Expo site and in 2012, a public engagement process was launched to improve the development concept. The green valley concept, for example, was brought in to integrate new sustainable solutions in both the urban design and the individual buildings on the site.

Technological innovation

Since the start of the Expo project, urban sustainability was the main focus. The sustainability concern was reflected in terms of applying new technologies and new planning concepts to sunlight, water, wind, noise, energy, resource and waste. Most of the analysis was computer-aided eco-simulation to understand how the most optimal micro-environment in public spaces and individual buildings could be created during and after the Expo. The concept of circularity was considered and applied in renewable energy, water recycling, waste reduction and waste reuse. For example, the water used in public space at the Expo Park went through square filtering, precipitation, sand filtering, rotating brush filtering, constructed wetland and an activation gas area to complete the water purification process. Later, this technological innovation in water purification was also applied to other water-related public space along Huangpu Riverbank. While Shanghai widely adopted technological innovation in planning the Expo at the urban and building scale, Expo 2010 Shanghai was the first Expo to have an Urban Best Practices Area (UBPA) to demonstrate tangible solutions to the world's challenges and invite cities to learn from successful cases. The UBPA concept provided a

vivid platform for cities to exchange knowledge, which has been reproduced by all Expos since. These solutions demonstrated by the UBPA, like the low-carbon concept, continue to be adopted in urban projects on the Expo site and citywide.

"Expo 2010 Shanghai was the first Expo to have an Urban Best Practices Area to demonstrate tangible solutions to the world's challenges"



Green Valley Offices project for the legacy phase of the Expo 2010 © Schmidt Hammer Lassen Architects



The Alsace Pavilion in the Urban Best Practices Area

World Expo 2010 as a stepping stone for social progress

The social impact of mega-events was often neglected in the past. Increasingly, host cities pay attention to the influence of events on local communities. This is due to the fact that not only is community support an essential aspect of a successful mega-event, but also that community groups tend to be more vulnerable to, and more affected by, event-led development. "The

urban areas which attract the promotors of mega events to a city – offering space to plan and play with – are often the same areas which have had serial government and commercial interest". Often people living and working in the area and local small businesses may experience the greatest impact but do not have a strong voice to represent their interests. In the discussion of Expo site preparations, social responsibility was raised from the beginning of the project as Shanghai believed that the Expo was intended for everyone living in the city. This social concern was reflected in three areas: first, the city adopted a people-centred approach to deal with societal-related issues in relocation; second, the city strived to turn the industrial landscape along Huangpu River into an urban waterfront serving all citizens at a substantial cost; third, efforts were made to engage the public in the Expo and in the decision-making process for the post-Expo era.

People-centred approach to relocation

Choosing the waterfront of the Huangpu River meant that the preparation of event's facilities began with the demolition and relocation of households and local enterprises in three districts of Pudong, Luwan and Huangpu. Shanghai's Expo site contained 270 existing factories and enterprises, factory dormitories built in the 1970s and various neighbourhoods, many of which were workers' villages from the enterprises in the neighbourhood. After investigation, a group of planners suggested that eight neighbourhoods (0.88km2 in Pudong New Area and 0.52km2 in downtown Puxi Area) could actually be preserved within the Expo site without disturbing the main Expo activities. In this way, 15,000 households could avoid relocation. With special Expo funds, these neighbourhoods were enhanced with improved public space, green areas and better access to public transportation such as new metro stations. Some 18,000 households from the 18 neighbourhoods within the 5.28km2 Expo site (3.93km2 in Pudong New Area and 1.35km2 in downtown Puxi Area) still experienced relocation between 2004 and 2010. To ensure the households experience minimum impact, Shanghai started the construction of neighbourhoods that could accommodate relocated households in time. Pujiang Township in Minhang District and Sanlinyongtai Garden in Pudong were completed by the end of October 2005 to relocate most of the relocated households from Pudong side. Pujiang Expo Garden was also put into use in December 2005 to receive relocated residents from Luwan and Huangpu Districts in Puxi. With a generally high standard of compensation, most households experienced a quality improvement in living conditions in term of space, functions and facilities, and well-designed public space in the neighbourhoods. The relocation plan also took into consideration the unity of the local community, trying to relocate the same households from the old neighbourhood in the same neighbourhood. Nevertheless, the relocated households required time to adapt to new living environment, especially because the new houses are located far from the city centre and the public transportation system was not initially well developed.

Social integration in redevelopment practice

One of the main aims of hosting the World Expo in Shanghai was to use the event as a stimulus to move all docks, factories and warehouses along the river, and to develop a waterfront integrating housing, places of work, culture, recreation, tourism and other functions for local citizens to enjoy. To realise this goal, Shanghai invested heavily in facilities for pedestrians, landscaping, and cultural facilities as well as in the infrastructure network before the Expo. The three main green areas realised as part of the Expo project – Expo Park, Houtan Park and Bailianjing Park – covering an area of 50 football fields in Pudong New Area along the Huangpu River, have formed a riverside green corridor. After the

Expo, Shanghai continued its efforts to transform the waterfront along Huangpu River into public space. For example, a total of 8.3km of promenade strips were created to connect the Bund area with the Expo site and South Bund area, with a total green area of 100,000m2, offering walking, jogging, cycling and relaxation space for local citizens.

"Local citizens gradually got to know the Expo and felt themselves as part of the mega-event"



Expo Park © Angelia2041

As Shanghai gradually defined its goal of creating world-class high-quality public space along the Huangpu River waterfront for its local citizens to enjoy in their daily life, the city organised an international design competition to invite experts from across the world to contribute to designing the open space at the East Bund of the Huangpu River. To realise the waterfront transformation with these creative design concepts, the city issued the first Three-year Action Plan in Developing Public Space along the Huangpu Riverbank (2015-2017). The action plan aimed to unlock the key bottlenecks between Yangpu Bridge and Lupu Bridge so as to connect the 30km waterfront from three urban districts – Yangpu, Xuhui and Pudong – by the end of 2017, offering citizens continuous green public space along the Huangpu River

for relaxation and sport. In total, 75 projects were defined in the action plan, and the entities responsible for the implementation were appointed. It is proved that this action plan was effective in reaching its goal of creating a total of 45km of pubic space along the waterfront for local citizens to enjoy in their daily lives. As more local citizens started to use the waterfront for sport, walking and relaxation, Shanghai issued the second-round Three-year Action Plan in Developing Public Space along Huangpu Riverbank (2018-2020) at the end of 2017, and the city has even included the goal of creating a high-quality waterfront in the Shanghai Master Plan (2017-2035).

Public participation in the post-Expo planning process

The social concern for various mega-events is to find a proper strategy to engage communities in participating and voicing their interest. During the Expo, 600,000 volunteers from local communities were encouraged to take part in the event's daily activities, and each household was provided with a ticket to visit the Expo. With such participation, local citizens gradually got to know the Expo and felt themselves as part of the mega-event. After the Expo, Shanghai first noticed discussion as to whether some exceptional appealing pavilions could be preserved and then adapted this idea to a more detailed planning guidance in Zone B. To further encourage public engagement, Shanghai decided to involve public opinion in the more detailed planning of the Expo site Zone A and Zone B. The consultation was held in May-June 2011. Based on this experience, a series of public consultations were held to engage public participation in the planning process. These efforts were the first step for Shanghai in carrying out its people-centred approach in the planning process to look for a more inclusive solution.

World Expo as a facilitator for regional integration in the Yangtze River Delta

While host cities of mega-events tend to establish legacy strategies and assess impacts from an increasingly comprehensive approach, combining economic, social, environmental and other concerns, these concerns are mostly focused within the boundaries of the host city. Beyond the host city territory, researchers have mostly paid attention to the role of event in enhancing regional infrastructure system and reshaping regional tourism, whereas some notice the effect of the event on redistributing investment and economic sectors at the regional level. Compared with the limited concern from previous Expo host cities, Shanghai started right from the beginning to examine the possible impact on integrated development in the Yangtze River Delta (YRD). The YRD, consisting of Shanghai, Jiangsu Province, Zhejiang Province and later, Anhui Province, was challenged with over-competition, repetitive investment and institutional bottlenecks preventing collaboration. As a result, the World Expo carried the potential to serve as a proper trigger for the regional unification process and stimulate collaboration among governments, business and social groups in urban transformation, economic upgrading, resource redistribution, social integration and tech/social innovation.

"Cities in the Yangtze River Delta used the Expo as a catalyst to improve institutional coordination"



The Yangtze River Delta region within China © Foreign Policy / Tea Leaf Nation

The discussion of concrete measures in regional collaboration regarding the World Expo started in 2003, with an agreement signed by cities in the YRD to collaborate on Expo preparations. A working group for Expo preparations was set up with joint force to host the Expo together and coordinate tourism service and facilities. Six major cities in the region including Suzhou, Hangzhou and Ningbo organised Expo forums on important issues such as liveable cities, digitalisation and urban development. Besides, a series of friendship days were organised every ten days during the Expo so each city in the region had the chance to welcome Expo visitors from different countries for exchange. For each of the involved cities, the Expo triggered urban development and beautification efforts to present the best image to the outside world. As a result, Expo 2010 Shanghai became the first Expo where all neighbouring cities in the region were active participants in the preparation of the event and played an important role within the Expo programme. Following the regional integration concept, the one-hour transport network system within YRD Shanghai was proposed. The Hangzhou High-Speed Train became the first regional infrastructure resulting from the regional collaboration. It was built in just 20 months and opened in October 2010.

The cities used the Expo as a catalyst to improve institutional coordination in urban planning, regional infrastructure, ecological preservation, business environment, sector development, tourism development, information sharing, and security. In the same year, a proposal was submitted by Zhejiang Province to establish an annual interaction system in the region for collaboration and economic development. Since 2005, cities in the YRD have met annually to discuss concrete measures to break up administrative boundary constraints and to promote

regional integration in the YRD. To stimulate the regional integration process, the State Council stated for the first time the goal of regional integration in the Yangtze River Delta in its 2008 policy document. In May 2010, the Yangtze River Delta Regional Planning was approved by the State Council, stating its goal of using the Expo as a catalyst to develop the region's competitiveness and improve the service sector and advanced manufacturing sector in the region. In 2016 and 2018, two workshops were held to discuss the integration of infrastructure, logistics, resources and markets. As a result, The Yangtze River Delta Region Integration Three-year Action Plan (2018-2020) was issued in June 2018, together with another policy document Short-term Yangtze River Delta Region collaboration focus. This action plan suggested more concrete integration plans for transport, energy, sector innovation, information network, environmental protection, public service and market openness. The YRD collaboration office was established in January 2018 to coordinate the implementation of the above plans. It is clear that the World Expo triggered the drive for regional integration and motivated involved cities to look for a win-win solution to overcome local protectionism, institutional barriers and over-competition. The cities in the YRD participated in the Expo project to profit from the dramatic increase in tourists and the tourism sector and used the Expo preparations as a testbed for regional collaboration measures.

Conclusion

As the first city from a developing country to host a World Expo, Shanghai obtained a comprehensive understanding of legacy creation in Expo cities, both tangible and intangible, and in spatial, economic, technical and social perspectives, by learning from previous host cities. A key concern in the various strategies Shanghai established for its Expo preparations was to balance the temporary short-term purpose of the event and the long-term post-event ambitions of the city.



Overview of Expo 2010 Shanghai

I highlighted four key legacies in this article: first, Shanghai realised its important urban restructuring process, using the Expo as a catalyst to expel powerful state-owned industries from the Huangpu River waterfront. The Expo project also triggered an ambitious urban regeneration program, notably the 113km Huangpu Riverbank Development. The Expo facilitated the development of the key areas in the Huangpu Riverbank Development project by delivering ready-to-develop urban land. Second, the Expo served as a knowledge generator to transcend the local planning regime with new planning concepts, planning methods, innovative technologies and a people-centred focus on sustainability and innovation. Shanghai used the Expo as a good opportunity to learn from previous host cities. At the same time, international planning experts introduced new planning concepts and technological advancements through a design competition to help Shanghai improve its vision of the Expo legacy plan and waterfront development. Third, the Expo paid special attention to the social perspective of the event preparations and post-event legacy creation in Shanghai. We have seen a continuous trend of community involvement and public participation in both the planning of the event and post-event development. Four, the Expo was used as a testbed to examine the possibility of regional integration and how the implementation of regional integration can be carried out in concrete measures by all cities involved. It is the first Expo in which cities in the region were actively involved in Expo preparations and Expo activities.

These collaborations triggered intensified regional integration efforts in infrastructural, economic, environmental and information-related collaboration.

What is worth highlighting is the learning process of the host city, curious to learn and improve, and determined to improve itself and the living environment for its citizens. These positive legacies Shanghai has created helps the city continue its development path towards the future, with more comprehensive concerns for the city's future, for the environment, for its citizens and beyond.

This article was first published in the 2018 edition of the BIE Bulletin entitled "Expo Cities. Urban Change".