

∞ SUSTAINABLE DEVELOPMENT ∞

fuel as feed, it takes precious cash from the limited purses of each household in the valley. Along with the benefits of centrally provided public service come regular cash payments. In the case of the Huangbaiyu biogas plant, between 15% to 20% of the median households annual income would now have to be paid to the utility. This cost competes against a families' choice of paying for a spouse's health care, a child's education or an adult son's wedding.

While a biogas plant may free up hundreds of labor hours per year per household, there is no employment to be had in this valley in the dead of winter. Chopping down wood and burning fuel is the most economical use of one's time, as it saves the family the expense of paying for services with cash that is dear. With family mountain forest lands sustainably managed eight to 10 year cycles for household use, in Huangbaiyu the implementation of a biogas plant would impoverish the local community while at the same time meeting the goals of global sustainability: low-

ered carbon emissions.

There's the rub of sustainable development: Who does it sustain? Designing from the perspective of a bird, the soil, the water, the current best practices of sustainability erase the people from Huangbaiyu from the ecosystem, leaving only nature—and the gaze of the designers. Seeing the promise of ecocities from the perspective of those living the "American Dream," the mission of the development became ensuring that any increased energy use in the countryside would not contribute to collapsing the foundations of their own livelihoods. The livelihoods of the impoverished had become invisible. This does not have to be the case. Huangbaiyu could have lived up to the promise of ecocities in the countryside—bridging the urban-rural divide while not contributing to ecological hazard. But for that to have been possible, sustainability would have had to begun from the premise that the lives and livelihoods of these rural residents were worth more than just their equivalence in carbon. ■

Nurturing Asia's World Cities

by Saskia Sassen

A RECENT STUDY OF more than 60 global economic centers yielded some interesting results. The survey confirmed a familiar fact: A significant number of Asian cities are now major global cities, i.e., they possess capabilities for servicing the global operations of firms and markets, for organizing enormous geographic dispersal and mobility, and for maintaining centralized control over that dispersal. Other findings were less obvious. For example, the yawning gap between Asia's older established global centers such as Tokyo, Hong Kong and Seoul, and the global-city newbies such as Shanghai, Mumbai and even glistening Dubai.

As globalization expanded in the 1990s it created a systemic demand for more and more global cities. Today, the worldwide network of the 50 or so global cities that are dispersed throughout the world, provides the organizational architecture for crossborder flows of people, capital and information. As many of the world's economies shift their reliance from the manufacturing to service sector, the growth of global cities will continue. Yet even an economy centered in manufactur-

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ing or mining will feed the urban corporate services economy. These are profound structural transformations that operate at regional, national and global levels. As a result we see the growth of these services for firms also in nonglobal cities. The difference for global cities is that they have to deal with the most complex segments of the transformation: when a firm or a financial exchange goes global, the level of uncertainty, the diversity of national legal, accounting, insurance systems, etc., all add to the complexity of management.

The network of global cities has also expanded as more and more firms go global. The management and servicing of much of the global economic system takes place in this growing network of global cities and city-regions. The reconstruction of these cities—whether downtown and/or at the edges—is part of this new economic role. It amounts to rebuilding key parts of these cities as platforms for a rapidly growing range of globalized activities and flows, from economic to cultural and political. This also explains why architecture, urban design and urban planning have all become more important and visible in the last two decades.

This combination of deep structural transformation in all developed economies and the need for building the strategic urban spaces of the new economy also creates a whole range of new environmental challenges as more and more global cities expand their ecological footprint to a global scale. China is only the grandest and most noted of this new generation of economies, after that older generation represented by the United States and the European powers have firmly planted their vast ecological foot on the world.

The tables nearby confine themselves to a few of the hundred data points in the larger study, but are sufficient to illustrate some interesting points. First, we include the top five “winning” cities to provide context. Then, we look at how Asian cities perform in the same category. (Occasionally an Asian city makes the top five.) For the most part, the data shown are subindicators, i.e., nonaggregated data. The one exception is Table 1, which describes the consolidated number based on the combination of the 100 data points in the study organized into more than 40 subindicators. These subindicators include very detailed economic data (how many days it takes for a foreign firm to open up a business, or to get a trading operation executed) as well as quality-of-life issues and knowledge economy variables (such as the presence of top-level research centers).

Table 1 shows clearly that four cities in East Asia rank among the top 10 in the world. Of course, the table also shows that some Asian cities, such as Beijing, Shanghai, and Bangkok—cities we might have expected to be in the top 10—are not.

The next two tables measure general social conditions. Table 2 looks at the provision of basic services including public transport and building maintenance, etc. The results show that only one Asian city is in the top five. Of note, Hong Kong and Seoul are in the middle range of the total group, while Shanghai and Beijing are way down the list, and Mumbai is at the bottom.

Regarding issues that concern firms and markets, some Asian cities perform very well, especially in the area of investor protection where Singapore, Hong Kong, and Kuala Lumpur rank first, second and

GLOBAL CITIES

Table 1 Overall Ranking

1 London	6 Singapore
2 New York	9 Seoul
3 Tokyo	32 Shanghai
4 Chicago	36 Bangkok
5 Hong Kong	46 Beijing

Table 2 Basic Services

1 Singapore	30 Hong Kong
2 Copenhagen	35 Seoul
3 Frankfurt	45 Shanghai
4 Munich	46 Bangkok
5 Vancouver	62 Mumbai

Table 3 Ease of Doing Business

1 Vancouver	12 Hong Kong
2 Toronto	16 Tokyo
3 Montreal	45 Bangkok
4 Singapore	48 Shanghai
5 London	60 Mumbai

SOURCE: MASTER CARD GLOBAL CENTERS OF COMMERCE STUDY, 2007

third followed by the group of nine U.S. cities in the study. Tokyo, coming in 20th place, performs poorly, as do Seoul, Jakarta and most cities of the Chinese cities surveyed. Table 3 shows the ranking for ease of doing business. Singapore again excels among the Asian cities, while Hong Kong and Tokyo are in the lower end of the top 20. The others are in the second half, with Mumbai and Delhi at the bottom.

So what does the data mean for Asian cities, and for the issue of sustainability? The established Asian cities such as Tokyo, Singapore, Hong Kong, and Seoul do rather well as economic centers and, to variable degrees in terms of general population issues. Kuala Lumpur and, to some extent Bangkok, occupy median positions. But the newly invented or reinvented economic centers such as Mumbai, Delhi, Shenzhen, Jakarta and Chengdu, find themselves at the bottom of these 60 major economic hubs in several of the variables under consideration.

These patterns are replicated in some of the other criteria not shown here. Perhaps most striking for a general public, given common notions in the media, is how poorly Shanghai, Beijing, Delhi and Mumbai do, all four major and glamorous newly re-globalized cities. Although, perhaps for those who live and work in these cities, these findings may not be so surprising.

The cities that can be considered "most balanced," i.e., that score well on factors that appeal to both corporate economic interests and as well as the general population's desire for a good quality of life are, perhaps not surprisingly, cities in Western Europe.

The challenges faced by Asian cities are both old and new. Among the old ones

are access to basic social services, the need for better urban infrastructure, and the need to address growing numbers of poor and barely housed residents. Among the new challenges are those linked to environmental standards. There are also the new demands imposed by the global corporate economy. Both, old and new types of challenges will ultimately be critical for any reasonable understanding of sustainable development.

Chinese cities offer both examples of failure as well as signs of potential. The Chinese cities that made the overall top 100 are extremely dynamic and have seen the most dramatic construction. Never in the recorded history have we seen such accelerated and vast growth. This scale of development should have facilitated the incorporation of existing environmentally friendly technologies. It is truly tragic that this, by and large, has not been the case. There is an extreme imbalance between China's massive financial effort and first-rate conventional urban planning in its major cities and the absence of such environmentally friendly options. This goes from elementary but important items such as the absence of bike paths throughout Shanghai's newly rebuilt city center, to the failure to implement solar and other alternative modes of handling energy needs, including through the use of particular types of architecture. With its vast and accelerated urban-development process China could have shown us how to do it. Even now there is a whole new generation of city-construction under way in China, including the building of entire new cities. No other country is building on this scale. It is imperative that China do it right this time and show the world. ■