Theme Paper

MANAGEMENT OF URBAN DEVELOPMENT

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Cities are the result of social and economic growth. In the last few decades, cities have undergone enormous changes, and urbanization has increased rapidly. Large cities and metropolitan areas have evolved and grown to unprecedented sizes. The average population of the largest cities was over 5 million in 1990, compared to 2.1 million in 1950. A much higher proportion of the urban population now lives in large cities and metropolitan areas. Soon after 2000, there will be more urban than rural residents. Urban areas have gone through great economic and political changes. The world economy has grown exponentially; no longer dominated by relatively closed national economies, it is now globalized. More people work in the services. These enormous changes in the scale and character of economic activity inevitably influence urban life.

Chinese urban development has been shaped by political, social, and economic changes. Economic reform and the open-door policy ushered in an era of rapid urbanization. By 2010, the urban-

ization rate will be 45 percent and there will be 1,000 cities. Urbanization will greatly promote social and economic development, but it will also create several social, economic, and environmental problems. All cities face the same challenge: to balance the relationship between development and environmental protection.

SUSTAINABILITY

Sustainability is assessed according to the following criteria:

- people's quality of life and sociopolitical stability;
- the scale of nonrenewable resource use, including the extent to which waste recycling or reuse reduces it;
- the scale and nature of renewable resource use, including the extent to which sustainable levels of demand for freshwater are maintained and the settlement's wider ecological footprint is preserved; and
- the scale and nature of nonreusable wastes generated by production and consumption activities, and methods of waste disposal, including the extent to which the wastes impact on human health, nature, and amenities.

According to the World Commission on Environment and Development's *Our Common Future*, sustainable development has multiple goals:

- Provide people with adequate livelihood and productive assets.
- Minimize waste of nonrenewable resources, including fossil fuels, and substitute renewable sources where feasible. Reduce use of, reuse, recycle, and reclaim scarce mineral resources. Conserve cities' irreplaceable and nonrenewable cultural, historical, and natural assets such as historical districts and parks.

- Meet communities' social, cultural, and health demands, including safe, affordable, and secure housing. Provide communities with running water, sanitation, drainage, transportation, health care, and an environment free of hazards (chemical pollution, for example). Provide housing and services that meet the specific needs of children and of adults responsible for child rearing (usually women).
- Use renewable resources, especially water, in a sustainable manner.
- Keep urban waste within the absorptive capacity of local, regional, and global water basins.

Sustainable Urban Development

Cities are economic, political, scientific, cultural, and education centers. With their dense populations and industries, abundance of commodities, convenient transportation, quick access to information, advanced science and technologies, and high productivity, they promote regional development through economies of scale. Their economic impact in turn speeds up urbanization. By 1998, there were 668 cities and more than 19,000 towns. Urban development management has become an important method of ensuring urban sustainable development.

For many years, urban development management emphasized only economic development. Industrial development was its priority target. While development no doubt has created prosperity and wealth, it has also resulted in the waste of great amounts of natural resources.

The shortage of natural resources and prevalence of environmental pollution have become critical. Urban pollution has even seeped into the rural areas. The traditional model of "high productivity, high consumption, high pollution" and the idea of "development first, pollution treatment later" have been debunked. We now know that a comprehensive solution lies in organically coordinating environmental protection and social and economic development.

Sustainable development ensures present needs without compromising future ones. It prevents depletion or degradation of resources. Municipal governments must consider how their policies and actions affect environmental assets and avoid depleting them in the long term.

Efficient Use of Land and Water Resources

Land and water are basic needs. Human dependence on land and water is nowhere clearer than in cities. The PRC has a large population, a developing economy, and scarce natural resources. It is home to about 22 percent of the world's population, but possesses only one fourth of all water resources and occupies only one third of the world's land. Beijing is one of the poorest cities in the PRC, suffering from a great shortage of land and water. Its area is about 17,000 km^2, of which one third is flat and two thirds mountainous. It has 344,000 ha of cultivated land, or about 0.032 ha per capita—lower than the national average and much lower than the world average. As the population increases and urban development continues, the conflict between demand and supply will become even more critical.

Beijing is only one of 40 major water-short cities. Average available water per capita is 400 m^3, or one sixth of the national average and one twenty-fifth of the world average. Since the 1990s, water consumption has continuously increased. Intensive exploitation of underground water has caused the quality of water to decline. In the next 15 years, the gap between water demand and supply will become even more critical. Water shortage may be 800 million m^3 in 2000 and 1.2 billion m^3 in 2010.

The shortage of resources shows how water and land have been wasted by blind urban development. The people are now paying for this great mistake. Urban management must give priority to rationalizing land use, protecting cultivated land, and developing and protecting water resources.

GOVERNMENTS' ROLE IN URBAN DEVELOPMENT MANAGEMENT

Cities are diverse in size and population, as well as economically, socially, politically, culturally, and ecologically. Their development objectives can therefore be achieved only by management that has specialized knowledge, resources, and skills.

Urban development management now governs the relationship not only between governments and national agencies, but also between governments and communities. The quality of urban development management determines the future of cities' productivity, population, and environment.

Institutional Capacity Building

The single most important and difficult aspect of urban development is building institutional structures that have the capacity to ensure economic development, cost reduction, and efficient use of resources. Most of the world's cities suffer from poor housing; lack of piped water, sanitation, and drainage; lack of basic services such as health care; traffic congestion; and air and water pollution. These problems arise largely because government institutions have failed to manage rapid change.

As shown in the 1980s and early 1990s, good management can increase economic and social gains, and greatly lessen environmental degradation. Good management ensures that people have safe and sufficient water, sanitation facilities, housing, transportation, education, and health care. A successful city is one where citizens and enterprises are able to achieve their goals without passing on the costs to others (including future generations) or to surrounding regions.

Good management copes with conflicting goals and competing claims of various interests. All cities face a variety of contradictions that are not easily managed and that require sophisticated regulations and accountable institutions.

Highly developed and urbanized countries have the basis for good management. However, it also takes them decades to develop

the institutional framework for good management. Most developing countries, including the PRC, lack the revenue for infrastructure and technology development.

Building national and local institutional capacity is a complex process involving policymaking, institution building, and training effective managers. It requires creating an enabling environment for development efforts.

URBAN PLANNING AND SUSTAINABLE DEVELOPMENT

At the end of the 1970s, the urban planning system was reestablished at the central, provincial, and municipal government levels. In 1984, the State Council promulgated the Regulations of City Planning. In 1989, the People's Congress approved the City Planning Act, which was implemented beginning 1 April 1990 all over the PRC. In 1993, the State Council issued the Planning and Construction Management Regulations for Villages and Towns.

The City Planning Act applies to all development and construction activities within planning areas defined by municipal governments. Provincial and city governments may issue their own implementing regulations and by-laws based on the law.

City Planning

The law provides that city plans should be divided into two levels: the master plan and the detailed structural plans. The master plan is approved first by the Municipal People's Congress and then submitted for approval to the higher government level. Cities under the direct jurisdiction of the State Council, provincial capitals, and cities with a population of over 500,000 should submit their master plans to the State Council for approval. The detailed structural plans should be approved by their People's Conference.

The master plan considers the city's nature, objectives, scale, construction norms and index, land-use structure, zoning, comprehensive arrangements for all types of construction, civil engineer-

ing plans, short-term construction plans, transportation, water resources, and landscape design.

The master plan's transportation system consists of the road network and land-use plan. It is generally not a modern transportation plan. It specifies the transportation system's land-use pattern rather than traffic forecast and analysis.

The municipal government often assigns urban planning institutes to draw up plans. Inviting bids is a recent practice. It also sets up a steering office (a standing body in some cities) to coordinate the relevant government departments. Often, a body under the steering office works with the urban planning institutes. During plan preparation, the departments and local and outside experts meet several times.

The detailed plans flesh out the master plan, further defining land use for short-term development and construction. They specify technical regulations governing land development and construction. They must be approved by the municipal government.

Implementation of City Plans

Implementation of the plans is the work of the municipal Bureau of Planning Administration, whose main functions are as follows:

- Invite relevant institutions to prepare hierarchical plans.
- Approve detailed plans under the master plan.
- Examine planning applications.
- Control land use and construction.

Under the City Planning Act, a developer needs permission from the planning administrative authority before applying for approval of a construction project's design. The law then requires land-use and building permits before construction begins. However, the law does not cover changes in building and facility use.

During plan implementation, the planning administrative authority often has to make adjustments to accommodate changes in

land use, for example, or in plot ratio and building density. Especially during urban regeneration, the requirements of development and control and of development and conservation often clash. Some cities have lost the qualities that once made them unique; some have suffered environmental damage and deterioration of quality of life.

Principles of Urban Planning

Urban planning is guided by the National Economic and Social Development Plan and by local conditions (natural environment and resources, historical context, existing characteristics). Good urban planning (i) promotes production; (ii) raises the standard of living; (iii) develops the economy; (iv) encourages science, technology, culture, and education; and (v) improves the city's security. It also protects and improves the city's environment, historical and cultural heritage, and natural beauty. It is concerned with what actually exists and with what the future can be.

Urban development management should follow the principles of urban planning. The master plan defines the city's nature, objectives, and scale. It also indicates (i) construction standards; (ii) land-use layout and zoning; (iii) the transportation system; and (iv) the location of rivers, lakes, and parks. Its most important objective is to meet demand for water, electricity, gas, heating, and communications.

Urban development management must balance the relationship between development and conservation. Development may damage the city's layout, environment, ancient buildings, and historical relics. Good management will not only protect the city, but also improve its ecological balance.

Challenges to Planning and Management

With the introduction of the socialist market economy and the advent of rapid urbanization, several challenges face urban planners:

- the requirements of policymaking and development control, and the need to coordinate and negotiate with different interest groups;
- the uncertain impact of globalization, which will force urban planners to be flexible but strong;
- the need to promote sustainability; and
- the need to improve the quality of life, including the city's ability to attract and retain investment by, among other things, providing transportation that is safe and nonpolluting.

Problems in Planning, Management, and Construction

Because they lack an understanding of sustainability, some cities have wasted their resources in order to raise funds for construction. Some have built infrastructure facilities too closely together, for example, reducing their efficiency, worsening social conflict, and laying the ground for future problems.

Illegal construction and land use are common problems in many cities, in some cases damaging historical sites. Some projects were carried out without permission. Buildings were constructed wherever there was a vacant space. Despite cities' moves to manage them, such activities continue.

Traffic congestion has become critical in cities of all sizes due to lack of planning in land use and transportation. In metropolitan areas, the average motor vehicle speed is 12 km/hour, down from 20 km/hour in the 1980s. In some city centers traffic often comes to a standstill.

During the last few years, some cities, especially medium-sized and small ones, have been competing with each other for large projects such as skyscrapers, highways, fly-overs, big squares, and glass-wall buildings. Cities have lost their character: now they all look alike.

The City Planning Act was passed to bring order to urban development. However, it has not been successful. Violations go unpunished; some local leaders ignore the law's principles. The problem lies in the law's lack of a clear definition of local governments'

implementing power and of the city people's conferences' supervisory power.

In some areas, the law has not even been implemented. In others, planning is poorly executed, with approved plans suddenly being changed in order to please local leaders. So many agencies have the power to engage in planning that their functions overlap. The law and local regulations even conflict with each other.

SOME PROPOSALS FOR THE FUTURE

Experience shows that violating urban planning principles harms the environment. It also shows that the planning system itself requires improvement.

Market-oriented Reform

The objective of economic reform is to establish a socialist market economy. As it moves to make urban development management more market-oriented, the Government must also reform the urban infrastructure investment system, the city utility charge system, and the urban management system.

Although the country is in transition from a centrally planned to a market economy, and although some domestic financial institutions and organizations are already investing in infrastructure, governments are still too active in the sector. Of course, even in a market economy governments still need to invest in urban infrastructure and involve themselves in its management. Infrastructure will always retain its public character; it exists to serve the people and to support the life of a city.

However, because governments have a limited budget and they are the only investors under the centrally planned economy, their burden is heavy. Governments should thus define their priorities and withdraw from the less important aspects of infrastructure development. They should concentrate on (i) utility projects that are important to cities' survival, (ii) major ecological environment development projects, and (iii) initial land development. But they

should attract investors into other projects and let market forces take over.

The public utility charging system should also be reformed. Some fees should be increased, while new ones—a solid waste treatment fee, for example—should be introduced. This will not only increase the budget for maintaining public utilities, but also raise maintenance and operation standards as well as teach the public to conserve resources and protect the environment.

A common problem is the lack of clear separation between management and construction, and between administration and business. Government departments have overlapping responsibilities, and their duties and powers are not clearly defined. Reform of urban development management should include clarifying agencies' roles in order to attract the interest of district and neighborhood governments and enhance their participation.

Flexibility

A rigid master plan will not be able to cope with the escalating changes and uncertainties of the socialist market economy. The "blueprint" planning system must give way to a more flexible planning system. A master plan should be an "indicative" plan, broadly describing development policies and guiding the detailed plan.

Institution Capacity Building and Training

Institutional capacity building and staff training is the most important task of urban planning. The National Academy of Administration and its provincial counterparts should establish urban and rural planning courses for mayors and other officials.

Public Participation in Planning and Management

Urban planning gives government a role in development, which inevitably gives rise to conflicts between the planning control system and proposed projects. Since projects affect local residents,

urban planning will be improved by popular participation. Plan implementation involves many parties—governments, enterprises, developers, and all the city's residents. For a plan to succeed, everyone must believe in it and act as though it were their own.

In most developed countries, laws require public participation in urban planning for two reasons:

- As the projects will no doubt affect all residents, everyone should know the details of the proposals and be allowed to express their opinions so that the government can ensure that the greatest number of people will benefit.
- Public participation will help investors and developers understand the planning issues involved as well as the investment environment.

The existing system requires consultation with some institutions, but public participation is limited. The system has three disadvantages:

- Before investing, the investor and the developer do not have the information that will allow them to invest wisely.
- While proposals should consider social, economic, and environmental benefits, in practice it is difficult to balance them. Their importance should be decided not only by policymakers, but also by the local residents, who (along with future generations) will be most affected by the project.
- Planners do not always understand the investment environment and investors' needs. Public participation allows investors to express their opinions before planning decisions are made.

Sustainable Development

If done carelessly or for economic progress alone, urban planning may ignore the environment and the requirements of the local community and of future generations. The PRC seeks to adopt the

socialist market economy only as a means and not as an end in itself. Planning is a method of creating wealth, which should be used to achieve social objectives: (i) improving the quality of life; (ii) protecting the environment; and (iii) promoting sustainable development.

Planning Supervision

In other countries such as the United Kingdom, an important element in planning is the review and inspection system. It resolves disputes between developers, individuals, and local government. It also allows the Government to be involved in local urban development and planning through professional planning inspectors.

The PRC's socialist market economy is sure to give rise to conflicts over development. A professional inspection agency, independent of local government, will help resolve conflicts among developers, the local planning bureau, and the community. It will also ensure that planning policies guide urban development.

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