
Corresponding authors:

Siu-Wai Wong
Department of Building and Real Estate
The Hong Kong Polytechnic University
Hung Hom, Kowloon, Hong Kong
Tel: (852) 27665829
Fax: (852) 27645131
Email: bssiuwai@polyu.edu.hk

Dr. Bo-sin Tang
Department of Building and Real Estate
The Hong Kong Polytechnic University
Hung Hom, Kowloon, Hong Kong
Tel: (852) 27665816
Fax: (852) 27645131
Email: bsbstang@inet.polyu.edu.hk

Dr. Basil van Horen
School of Geography, Planning and Architecture
The University of Queensland
Australia
Tel: (617) 33656707
Email: b.vanhoren@uq.edu.au

Abstract

While the importance of urban management in achieving sustainable urban development is increasingly recognised as being significant by urban managers and the general public, there is still great deal of confusion and misunderstanding in China about the substance of urban management, which impedes effective implementation. This paper examines some of the problems encountered in urban management practice in Chinese cities, and highlights the importance of a holistic conceptual understanding, and a strategic model for enhancing urban management capacities in the Chinese context. Focusing on a case study of Guangzhou Development District (GDD), the paper demonstrates that the application of a set of measurable evaluative criteria for assessing urban management performance is useful in improving urban management practice.

Key words: urban development, urbanisation, planning, strategic urban management

Introduction

With the promotion of an open door policy in the early 1980s, the Chinese government reversed its anti-urbanisation policy, and urban development in China expanded substantially. According to the statistics compiled by Liu et al (2003), the number of cities in China increased from 193 to 666 with an average annual growth rate of 26 cities during the period from 1983 to 1996. It is anticipated that China’s rate of urbanisation will continue to accelerate as urban development is underpinned by the Chinese government’s belief that a higher level of urbanisation can stimulate national economic development which will help to narrow the gap in the living standards between farmers and urbanities. Given that the current urbanisation level of China is still behind the world average of 42% (World Bank, 2001), the Chinese government has decided to further boost the country’s urbanisation process. In 2003, the Ministry of the State Development Planning Commission pointed out that China’s urbanisation was entering the fast lane and would reach over 50% by 2020.
Urbanisation generates numerous opportunities and challenges. On one hand, it has contributed to economic growth in China, especially in urban areas. On the other hand, rapid urbanisation has resulted in many problems such as congestion, shortage of housing, pollution, environmental degradation and social conflicts in many Chinese cities (Zhao, 2004; M. Lin, 2004). Having created the above problems, the importance of urban management has received increasing attention in China with more and more local governments seeking ways to strengthen the management capacity of their cities. However, numerous difficulties have been encountered due to the conceptual complexity of urban management, as well as the complex nature of urban affairs in Chinese cities, influenced by their specific historical and local background. While urban development is shifting from a centrally planed system to a market-led and more strategically focused one, the existing urban management practices in Chinese cities have run into many problems which will be outlined below.

First, urban management in many Chinese cities has been organized along sectoral lines with limited fiscal base and limited autonomy. Local governments usually lack corporate decision making capacities and thus concentrate on public services delivery only (Wang, 1994). Such a management pattern limits the understanding of urban management at the local level. For example, some local officials tend to consider that urban management is associated with the management of municipal services such as water supply and sanitation only. Second, it is a common phenomenon in many Chinese cities that investment in soft infrastructure (management and maintenance) cannot match the investment in hard infrastructure. Even in some of the well-developed cities such as Shanghai, lack of management is one of the core problems in infrastructural development (Zhu and Zhou, 2004). As a result, newly-developed infrastructure depreciates quickly, which then reduces the quality of the investment environment and hinders economic growth. Third, the ambiguity in responsibilities of governmental departments reduces transparency and accountability in public administration (Zhu and Zhou, 2004; Wu and Ma, 2004). In addition, local governments tend to set up new ‘urban management departments’ in order to address specific urban problems such as city cleanliness and pollution. These new departments cannot effectively meet their original intentions in
improving urban management practice since they fail to coordinate with the existing local government departments. Fourth, while the importance of urban management is recognised, legislation has been used as one of the important tools in strengthening urban management (Xin, 1995; Zhou and Chou, 2004). However, it often turns out that many regulations cannot be enforced effectively in practice because the institutional capacities in many Chinese cities are still limited.

Apart from the above, insufficient responsiveness and public participation are major problems in many Chinese cities. Urban management is still following a government-led model in which government departments are responsible for controlling the entire process of urban affairs. As You and Chen (2004) argue, public participation in urban management in China is still at an initial stage, which is characterised by informing the public rather than collecting opinions for improving urban development policy making. Due to the lack of public involvement, many officials (and especially those at the local level) pursue urban management projects by setting unrealistically high objectives for their city development. Even worse is that some urban management plans have been used as a means to enhance local officials’ personal ambitions and career performance.

Given the problems listed above, it is noted that there is a great deal of confusion and misunderstanding about the substance of urban management in China. Therefore, if urban management is to make a greater contribution to the sustainable development of Chinese cities, a holistic and systematic understanding of the concept, principles and approach of urban management by urban managers as well as the general public is essential. This paper will review the conceptual substance of urban management, and will present a set of evaluative criteria based on a strategic approach for assessing urban management performance. The application of the criteria will be applied to a case study of Guangzhou Development District, which is one of the fastest growing urban areas in China. The findings of the paper are expected to assist urban management practitioners in identifying problems in managing their cities and then give them opportunities to make continual improvement on their urban management practices. This paper is also expected to contribute towards clarifying the dynamic concept of urban management, which is
widely considered to be elusive and difficult, to ensure stronger interpretive power and practical value.

**A Holistic Understanding of Urban Management**

The conceptual elusiveness of urban management is underlined by the integrative and dynamic affairs associated with urban development. Pugh (2000) argues that managing urban development for sustainability is about a range of patterns of growth and change that are environmentally, economically and socially better than alternative patterns. Willis (2001) suggests that managing urban areas for sustainable development requires knowledge of local traditions, respecting and building upon local cultural values. Van Dijk (2003) argues that a key element of urban management is to make a city more competitive, equitable and sustainable through coordinating and integrating the public and the private sectors to tackle the major problems faced by the cities’ inhabitants. When urban management aims to work for the attainment of sustainable urban development and addresses a wide range of sectors including physical, economic, social, cultural, environmental and institutional dimensions, it is not surprising that urban management has been considered as a complicated concept.

The importance of a holistic understanding of urban management has been addressed in the western literature. Stren (1993) criticizes the sectoral approach adopted by the Urban Management Programme (UMP) of the United Nations as being inadequate in dealing with the increasing complexity of urban growth, and retaining ambiguities in the overall concept of urban management. He advocates an inter-sectoral approach and a more conceptually diverse concept to urban management. Werna (1995) also suggests that the lack of a thoroughly developed concept makes urban management run the risk of developing scattered interventions. McGill (2001) suggests that urban management is more likely to succeed if it is seen in a holistic and integrated way and advocates urban and institutional capacity building as part of the urban management process.
To address the conceptual elusiveness of urban management, extensive literature has made an attempt to clearly define what urban management is. Amos (1989) defines urban management as the responsibility of municipal government and suggests that it is concerned with all aspects of urban development, both public and private. Rakodi (1991) suggests that urban management aims to ensure the effective daily functioning of a city which facilitates the economic development of the city to promote economic and social well being, and to ensure provision of essential public utilities and services. Shabbir Cheema (1993) addresses the role of non-government organisations in urban management and suggests that urban management aims at strengthening the capacity of both government and non-government organisations to identify policy alternatives and to implement them with optimal results. McGill (1998) further clarifies the essential meaning of urban management by suggesting that urban management has a twin objective: ‘to plan for, provide and maintain a city’s infrastructure and services and to make sure that the city’s government is in a fit state’. His interpretation clearly indicates that urban management has both strategic (to plan) and operational (to provide and maintain) functions. Davidson (1996) suggests urban management is a broad concept, and that urban planning is a tool of urban management. Rakodi (2001) supports this view and argues that urban management involves policy formation, resources allocation, implementation and operation, which means that planning, is only one function of urban management.

Drawing on the above literature, a clarification of the conceptual issues of urban management can help in synthesising some key points about urban management, thereby making the substance of urban management clearer. First, the ultimate purpose of urban management is to enhance the competitiveness and sustainability of a city. Second, urban management requires an integrated approach as it is concerned with all sectors associated with city development, noting that these sectors are all interactive. Third, it is concerned with strategic and operational interventions. Moreover, it requires strong commitment from a robust government supported by active involvement of the private sector and the community. That means governments should play a role as a driving force to integrate all players and focus on promoting a fair environment in which competition is encouraged.
Strategic Urban Management Approach

It is clear from the above literature review that urban management needs to be understood holistically, and that it needs to be able to manage changes and volatility associated with urban development. Thus, it is difficult for urban management to succeed if it is to operate within a rigid statutory framework. Under certain circumstances, action plans made under strategies may be required to translate into statutory planning instruments. However, urban management in itself will not be strengthened through legislation. To address the complexities of urban management, especially those in Chinese cities where urban development is expanding so rapidly, a flexible approach which can effectively cope with volatility and fluidity is of importance.

With the changing global urban context in which greater emphasis has been placed on the market-led approach, traditional statutory-based planning has been subject to extensive criticism because of its inflexibility and rigidity, and thus there is a strong call for a more flexible approach to urban planning and management. Clarke (1992: 149-150) suggests: ‘Traditional master plans have been mainly static in nature, attuned to a scenario of slow urban growth …..Rapid population growth, lack of infrastructure and services, and shortages of funds and staff in a developing country city, require a more dynamic planning process.’ Rondinelli (1993) also suggests an adaptive approach based on the concept of strategic planning should be explored to cope with, and to direct, the changing conditions under which development activities must be implemented. Rakodi (2001) reinforces these propositions and suggests that the quality of urban planning and management should be improved by a stronger conceptualization, by moving away from inflexible blueprint plans toward a combination of strategic and detailed action plans and programmes.

Strategic management is a concept which has been widely and successfully adopted by business organisations for strengthening competitiveness. It is widely defined as a continuous and systematic process during which planning, implementation, monitoring
and evaluation are involved to achieve objectives. Although managing an urban area may be much more difficult than managing a company, the principles of strategic management can be applied to urban management with appropriate adjustments. Based on the concept of strategic management, DFA (2001) have developed a strategic model incorporating the following principles to guide urban planning and management:

- **Focus on outcomes** rather than outputs normally delivered by an organisation.
- **Tailor the process to the problem**, taking into account its nature and complexity, political and community imperatives, and the availability of resources and time.
- **Generate possible futures**, identifying the kind of future we would like to move towards. (This requires the development of a long-term holistic vision, which can encompass anywhere from 5 to 20 or more years into the future.)
- **Means and outcomes** - consider the full range of means available to achieve intended outcomes.
- **Consider all stakeholders**, including organisations whose activities impinge on achieving the outcomes and all who have an interest in the fulfilment of outcomes.
- **Trade-offs** – reveal the choices to be made to bring about a desired future in the light of the anticipated gains and losses for each group of stakeholders of options to achieve that future.
- **Use ‘iterations’** - review and, if necessary, modify the results of earlier stages of the planning process in the light of feedback of results from subsequent stages.
- **Timing** - decide when to commit to important strategic choices and avoid prematurely closing off options.
- **Support transparency and accountability** - this involves paying attention to why and by whom decisions are made and how and by whom responsibilities and accountabilities for implementation are allocated.
- **Monitor the strategies and actions**, measuring their effectiveness in achieving the desired outcomes. Baseline and Target Benchmarks must be able to evaluate qualitative outcomes as well as quantitative outcomes, and measure
progress on all aspects of well-being, including social, environmental and economic dimensions.

**Identify spatial areas**, which may be local or regional. Although strategic plans do not always have to be spatially focused, but can rather have a focus on a particular problem, the links to the achievement of strategic planning goals and objectives at a spatial level still need to be clearly articulated.

**Integrate economic, environmental, social, cultural and equity factors**, since these are inextricably linked.

The above set of principles highlight two key elements for the strategic model required to manage a city in view of the different nature of stakeholders including the corporate sector. First, it emphasizes the importance of getting the key stakeholders, including community and implementation agencies involved in all stages of planning in order to make planners responsive to the community needs and values. Second, it emphasizes that the measurement of the effectiveness of strategies and actions in achieving urban development objectives should focus on the progress of all aspects of public well-being including physical, economic, social, environmental and institutional dimensions.

Several key elements can be presented as part of a strategic management approach to guide urban planning and urban management. First, the strategic management process is a set of decisions and actions about what to do, why to do it and who should do it. Thus, it encourages transparency and accountability. Second, strategic management takes into account the circumstances of the internal and external factors influencing the development of a city. A clear understanding of external, environmental, and internal strengths enables decision makers to handle changes and volatility in urban development. Third, strategic management allows effective (internal) monitoring and (external) evaluation. It is essentially an iterative process where the basic steps are repeated in the same order until further possible improvement in the plan is not significant. Such a process can facilitate setting realistic goals based on resources available and then ensure that available resources are fully utilised to achieve the goals and objectives identified. Finally, strategic management recognises that the successful implementation of strategies
requires a supportive framework of governance institutions which includes cooperation among all levels of government, the private sector and the community. It encourages and facilitates the involvement of all key stakeholders and interest groups in all stages of urban planning and management. As a result, urban development polices are more responsive to community values and therefore have a greater chance to succeed.

Strategic management is a more adaptive alternative to cope with the dynamics and uncertainties of urban development and to address the current problems in the urban management practice in many Chinese cities. Such similar views have also been advocated among Chinese planners and social scientists. Yeh and Wu (1999) suggest the present planning system of China should be streamlined and the utopian vision of ‘comprehensive control’ should be discarded. Zhang (2001) advocates that master planning work in China should be reformed so as to adapt itself to the rapidly changing economy and society. C.S. Lin (2004) calls for Chinese planners to engage more actively in mainstream theoretical debates and knowledge advancement.

**Criteria for Assessing Urban Management Performance**

When using a strategic model to guide urban management, a set of criteria for measuring the qualitative and quantitative outcomes is necessary. This is a key step to facilitate monitoring and evaluating outcomes which determine how the process should be revised in order to ensure matching between development objectives identification and available resource allocation. In addition, if urban management performance is assessed with reference to a set of generally accepted criteria, decision making for urban development will be less influenced by the personal ideas of local officials.

Based on a holistic understanding of the substance and approach of urban management, a set of criteria that addresses all aspects of well being, including physical, economic, social, cultural, environmental and institutional dimensions, is presented below with a view to providing a framework for assessing urban management performance.
### Table 1. Evaluative Criteria for Urban Planning and Management

<table>
<thead>
<tr>
<th>Sectors</th>
<th>Evaluative Criteria/Indicators</th>
</tr>
</thead>
</table>
| **Improvement in Physical Conditions** | Housing conditions are satisfactory.  
(a) construction quality;  
(b) good quality building materials;  
(c) adequate average living space per person  

Services such as water and electricity supply, sewage and drainage and garbage removal are available and well maintained.  
(a) length of water pipe, cable and drainage  
(b) at available ratio for household  
(c) at available ratio for business requirements  
(d) frequency of breakdowns  
(e) adequate maintenance plans/programmes available  

Access for pedestrians and vehicles is satisfactory.  
(a) Length of roads, vehicle per km of road (limited congestion)  
(b) Average time spent travelling between home and working places  

Recreational facilities and community facilities are satisfactory.  
(a) number of playground/stadium/public library/parks;  
(b) landscaping area per person;  
(c) percentage of people living within walking distance of recreational facilities  

Health facilities are satisfactory.  
(a) hospital beds/medical staff per thousand population;  
(b) life expectancy;  
(c) infant mortality;  
(d) expenditure on health facilities as a percentage of GDP  

Educational facilities are satisfactory.  
(a) number of students enrolled  
(b) student to teacher ratio  
(c) expenditure on education as a percentage of GDP  

Adequate sites, premises and basic services are available for investors.  
(a) volume of land granted to business use per annum  

| **Economically Viable** | Economy is growing.  
(a) GDP and GDP per capita  

Gross domestic fixed capital formulation is increasing.  
(b) Percentage to GDP  

Economic structures (industries) are at an acceptable level.  
(a) ratio between the secondary and tertiary industries;  
(b) the share of core industries in GDP  

Employment opportunities are enhanced.  
(a) Employment rate  
(b) underemployment rate  

A stable, welcoming and regulatory business environment is provided.  
(a) number of investors  
(b) number of new enterprises per annum  
(c) total utilized foreign capital  

Taxation system base is effective.  
(a) Profit and income tax revenue |
| Socially Equitable | Community has access to adequate and affordable housing.  
(a) Affordability ratio: monthly expenditure on housing/monthly household income  
(b) Average waiting time for public housing  
(c) median rent to income ratio for public housing  
(d) facilities and services available for the disabled  
(e) anti-discrimination laws are in place  
| Society is in good order.  
(a) Overall criminal rate is low.  
(b) Policy making and plans are responsive to community views and value.  
(c) Policy information is accessible to the general public  
(d) Code/Regulations on access to information are in place  
(e) public consultation put into legal framework and special governmental department responsible for dealing with opinions and complaints from the public;  
(f) conflict resolution mechanism in place  
| Adequate educational opportunities are provided.  
(a) number of student members of civic education;  
(b) number of vocational training opportunities provided  
| Health services are accessible and affordable to the public.  
(a) Average waiting for medical treatment;  
(b) the ratio of medical expenditure to average personal disposable income  
| Culturally Sustainable | Traditions and customs are respected.  
(a) number of major programmes/activities related to the promotion of traditional culture  
(b) number of public holidays for celebrating traditional festivals  
| Cultural assets are protected.  
(a) Number of designated cultural and historical sites; and  
(b) number of projects for historical building refurbishments and protection  
| Cultural diversity is promoted.  
(a) Annual ticket sales for major cultural events  
| Environmentally Sustainable | Clear water resources are available.  
(a) volume of fresh water supplied per capita  
| Air quality is improved.  
(a) air pollution Index  
| Energy consumptions are efficient.  
(a) consumption of energy per unit of GDP output  
| Waste disposal systems are effective.  
(a) solid waste discharged per capita per day;  
(b) sewage discharged per capita per day  
<p>|</p>
<table>
<thead>
<tr>
<th>Institutionally viable</th>
<th>Planning and Commitment for Implementation</th>
<th>Supportive Resources</th>
<th>Management</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(a) A holistic long term vision is defined based on inputs and general agreement of all key stakeholders in government and civil society;</td>
<td>(a) Planning and management process designed to tailor organizational structure rather than the reverse;</td>
<td>(a) The contestability principle is applied;</td>
</tr>
<tr>
<td></td>
<td>(b) Strategic plan is in place. This includes implementation plan, and measurable indicators to monitor urban management performance.</td>
<td>(b) Local policy framework at national and provincial levels is supportive;</td>
<td>(b) All stakeholders are meaningfully involved in decision-making;</td>
</tr>
<tr>
<td></td>
<td>(c) Government is committed to a time-frame for the implementation of some major strategies and policies</td>
<td>(c) Policy at national, provincial and local levels is coordinated and compatible;</td>
<td>(c) Roles of public sector, private sector and NGO are specified;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(d) Local government has the technical and financial capacity to implement planned programmes and projects.</td>
<td>(d) The principle of subsidiarity is adopted;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(e) Local government has resources to maintain infrastructure on an ongoing basis.</td>
<td>(e) Conflict resolution mechanism is in place;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(f) Decision making is transparent and accountable;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(g) Effective monitoring and evaluation system is in place.</td>
</tr>
</tbody>
</table>

Application of Evaluative Criteria – Guangzhou Development District Case Study

The purpose of evaluation is to enable urban management practitioners to review the way in which their city is currently managed, and then to identify sectors that require improvement. The evaluative model introduced in the above section may be used in different ways for evaluating urban management performance where different cities are concerned. A case study of Guangzhou Development District (GDD), which is one of
fastest growing urban areas in China, is presented below to demonstrate the application of these criteria.

1. Background of Guangzhou Development District

GDD is located to the east of Guangzhou City and was developed from four economic zones\(^1\) which were designated for accommodating foreign investment in the 1980s-1990s (see Figures 1-3). With the development strategy of “exploration in the south, optimisation in the north, extension in the east and co-ordination in the west” made at the municipal level, GDD is being developed into the second urban centre of Guangzhou City. By 2004, GDD comprised a total area of 215 square kilometres and accommodated a population of approximately 120,000. The rapid urbanisation has resulted in a number of problems associated with economic structure, land resource allocation, environmental degradation, and the provision of social security and welfare. Under such circumstances, the previous management mode which focused on attracting foreign investment has been inadequate to manage the district. The local government of GDD (i.e. the GDD Administrative Committee which is delegated by the Guangzhou Municipal Government with powers to exercise unified leadership and administration) has recognized the problem and actively responded to it by seeking ways to improve its urban planning and management practice.

\(^1\) Four development zones include Guangzhou Economic and Technology Development Zone (GETDD), Guangzhou Hi-tech Industrial Development Zone (GHIDZ), Guangzhou Free Trade Zone (GFTZ), and Guangzhou Export Processing Zone (GEPZ).
Figure 1: Location Map of Guangzhou City

Figure 2: Location of Guangzhou and Its Main Administrative Districts
Source: adapted from Xu and Yeh (2003)
With the functional transformation from an economic zone to an urban area, the development vision of GDD is ‘to build up a green ecological town ideal for business and living’. To achieve this vision, the GDD Administration Committee has been shifting its urban management work to focus on the following issues: (1) creation of an innovative environment for high-tech industries through the continuous investment in infrastructure and the establishment of a science innovation base; (2) optimisation of economic structure through adjusting the ratio between secondary and tertiary industries; (3) optimization of land use management system through establishing a regulatory framework with particular reference to international experience to guide the practice of land acquisition and management; (4) development of human resources through introducing a new human resource management mechanism to attract and sustain new talents; and (5) Strengthening the management of ‘urban villages’ by focusing on the resettlement of villagers affected by land resumption for urban development and the conversion of household status of the affected villagers form ‘agricultural’ to ‘non-agricultural’ to ensure they legally enjoy urban welfare benefits including heath care and education.

2. Evaluation and Analysis

By using the evaluative criteria discussed in the previous section, the effectiveness of the way in which GDD is currently planned and managed is collectively evaluated as follows:

**Table 2. Evaluation of Urban Management of GDD**

<table>
<thead>
<tr>
<th>Sector</th>
<th>Evaluative Principles</th>
<th>GDD’s Indicators</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improvement in Physical Conditions</td>
<td>Housing conditions are satisfactory.</td>
<td>Average living space: 0.7m² per person</td>
<td>No. (3)</td>
</tr>
</tbody>
</table>
|                                       | Services such as water and electricity supply, sewage and drainage and garbage removal are available and well maintained. | Drainage: 632 km 
Water supply: 860,000 Watts/day 
Power supply: 158,000 m³/day 
Telephone exchange: 120,000 lines 
Optical fibre cable system is being developed | Yes. (1) |
<p>|                                       | Access for vehicles is satisfactory.                        | Road: 68.08 km roads                                                             | Yes. (1) |
|                                       | Access for pedestrians are satisfactory                      | Information not available.                                                       |        |
|                                       | Recreational facilities and community facilities are        | Recreational facilities available for foreign investors only                      | No.     |</p>
<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Yes/No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health facilities</td>
<td>Health facilities are satisfactory.</td>
<td></td>
</tr>
<tr>
<td>Educational facilities</td>
<td>Educational facilities are satisfactory.</td>
<td></td>
</tr>
<tr>
<td>Adequate sites</td>
<td>Adequate sites, premises and basic services are available for investors.</td>
<td></td>
</tr>
<tr>
<td>Lack of community</td>
<td>Lack of community halls, public libraries etc.</td>
<td>No. (3)</td>
</tr>
<tr>
<td>beds, public libraries</td>
<td>Beds in medical wards: 1.63 beds per thousand people Medical staff: 1.76 per thousand people</td>
<td>(but</td>
</tr>
<tr>
<td>improving</td>
<td></td>
<td>improving)</td>
</tr>
<tr>
<td></td>
<td>Secondary school students: 1,033 Primary school pupils: 1,379 Kindergarten children: 544 (increased by 23.7% in 2002). One international (Japanese) in Science City (2) In-service training programs: 124</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Substantial investments have been made by the government to make land in GETDD available for investors Science City will provide “shovel ready” land for investors</td>
<td>Yes. (3)</td>
</tr>
<tr>
<td>Economic structures</td>
<td>Adequate sites, premises and basic services are available for investors.</td>
<td></td>
</tr>
<tr>
<td>Economic structures</td>
<td>Economic structures (industries) are at an acceptable level.</td>
<td></td>
</tr>
<tr>
<td>Employment opportunities</td>
<td>Employment opportunities are enhanced.</td>
<td></td>
</tr>
<tr>
<td>Regulatory business</td>
<td>A stable, welcoming and regulatory business environment is provided.</td>
<td></td>
</tr>
<tr>
<td>Taxation system base</td>
<td>Taxation system base is effective.</td>
<td>No. (5)</td>
</tr>
<tr>
<td></td>
<td>(Profit and income tax revenue)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Consumption costs are fully recovered</td>
<td>Yes. (5)</td>
</tr>
<tr>
<td></td>
<td>Consumption costs and charges are affordable to the public.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Public fiscal conditions are maintained in good status.</td>
<td>Yes. (5)</td>
</tr>
<tr>
<td></td>
<td>Fiscal surpluses have been recorded from 1997.</td>
<td></td>
</tr>
<tr>
<td>Socially equitable</td>
<td>Community has access to adequate and affordable housing.</td>
<td>No. (3)</td>
</tr>
<tr>
<td></td>
<td>Low income households and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Insufficient residential buildings provided</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Information not available</td>
<td></td>
</tr>
</tbody>
</table>

Note: (1) = Yes; (2) = No; (3) = Improving; (4) = Yes; (5) = No.
<table>
<thead>
<tr>
<th>Culturally Sustainable</th>
<th>Traditions and customs are respected.</th>
<th>Information not available</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cultural assets are protected.</td>
<td>Information not available</td>
<td>No.</td>
</tr>
<tr>
<td></td>
<td>Cultural diversity is promoted.</td>
<td>Information not available</td>
<td>No.</td>
</tr>
<tr>
<td>Special Social Groups</td>
<td>- The interests of disabled people are properly addressed.</td>
<td>No special facilities and services provided for the disabled</td>
<td>No.</td>
</tr>
<tr>
<td></td>
<td>- Policy information is open to the public.</td>
<td>Promotion of “Electronic Service” providing online policy information</td>
<td>No. (1) (but improving)</td>
</tr>
<tr>
<td></td>
<td>- Society is in good order.</td>
<td>Information not available</td>
<td>No.</td>
</tr>
<tr>
<td></td>
<td>- Policy making and plans are responsive to community views and value.</td>
<td>Public consultation hasn’t been put into legal framework Effective conflict resolution mechanism hasn’t been formulated</td>
<td>No. (but improving)</td>
</tr>
<tr>
<td></td>
<td>- Adequate educational opportunities are provided.</td>
<td>Information not available</td>
<td></td>
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<td></td>
<td>- Health services are accessible and affordable to the general public.</td>
<td>Information not available</td>
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<tr>
<td>Environmentally Sustainable</td>
<td>Planning and Commitment for Implementation</td>
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<tr>
<td>Clear water resources are available.</td>
<td>A vision of “building GDD into a modernized ecological city ideal for both business and living” has been defined.</td>
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<tr>
<td>Air quality is improved.</td>
<td>Strategies are defined but implementation plans and measurable indicators not yet available.</td>
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<td>Energy consumption is efficient.</td>
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<tr>
<td>Waste disposal systems are effective.</td>
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<td>Reuse and recycle programmes are implemented.</td>
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<td>Public transportation is convenient.</td>
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<td>Polluter pay principle is implemented.</td>
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<td>Biodiversity is promoted.</td>
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<td>Safeguarding the environment for present and future generations.</td>
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<td>Public awareness of health environmental protection is improved.</td>
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<tr>
<td>Water supply: 158,000 m³/day</td>
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<td>Information not available</td>
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<td>Information not available</td>
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<tr>
<td>Solid Waste is centrally disposed by government 632 km of drainage and one sewage discharge factory(1)</td>
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<td>Information not available</td>
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<td>Information not available</td>
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<tr>
<td>Industrial users need to pay electricity fee at a higher unit rate than domestic users Industrial users need to pay water fee at a higher unit rate than domestic users Sewage treatment fee is charged.</td>
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<td>Yes. (1)</td>
<td>Yes. (2)</td>
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<td>Yes.</td>
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<td>Yes. (2)</td>
<td>No.</td>
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<td>Yes.</td>
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</table>

Institutionally Viable

(a) A holistic long term vision is defined based on inputs of all key stakeholders in government and civil society;

(b) Strategic plan is in place. This includes action plans, and measurable indicators to monitor urban management performance.

(c) Government is committed to a time-frame for the implementation of some major strategies and policies such as the completion of the Science City
## Supportive Resources

(a) Planning and management process are designed to tailor organizational structure rather than the reverse;  

(b) Local policy framework at national and provincial levels is supportive;  

(c) Policy at national, provincial and local levels is coordinated and compatible;  

(d) Local government has the technical and financial capacity to implement planned programmes and projects; and  

(e) Local government has resources to maintain infrastructure on an ongoing basis.  

The existing governance system and structure are developed based those used before the joint operation of 4 development zones  

GDD’s development policies are recommended as good examples by the provincial government  

Local government is responsible for provision and delivery of infrastructural expenditures.  

27 billion yuan spent on maintenance and refurbishment of existing infrastructure facilities  

### Management

(a) The contestability principle is applied;  

(b) All stakeholders are meaningfully involved in decision-making;  

(c) Roles of public sector, private sector and NGO are specified;  

(d) The principle of subsidiarity is adopted;  

(e) Conflict resolution mechanism is in place;  

(f) Decision making is transparent and accountable.  

(g) Effective monitoring and evaluative system is in place.  

The government still plays an dominant role in the provision of public good and services  

Public-private partnership has not been established.  

Information not available.  

Still centrally conducted by the government but not the third party  

Overlapping between the responsibilities of some governmental departments make accountability difficult.  

Decision making is transparent and accountable.  

Effective monitoring and evaluative system is in place.  

Notes: (1) information from GDD Economics, Science and Technology Bureau (2003); (2) information from GDD Economic Development Bureau (2003); (3) information from GDD Statistical Bureau (2002); (4) information from GDD Administrative Committee (5) information Guangzhou Statistical Bureau (2003); and others are from fieldwork;
The results of the evaluation in Table 2 are further elaborated and explained as follows:

(1) Improvement in physical conditions
Basic infrastructural facilities and services such as water supply, power supply, sewerage and drainage and garbage removal have been well developed within GDD. These facilities and services mainly serve the companies operating in the district. Domestic facilities are, however, inadequate. Moreover, during the site inspection to GDD, it was found that community facilities such as public libraries and sport centres are not yet available. Education facilities have been improved over the past two years. Health facilities within the district are still unsatisfactory as one medical staff member needs to serve more than 1,000 people (GDD Statistical Bureau, 2002).

Statistical figures regarding technical viability are absent in the statistical reports. However, during the site inspection to GDD, the local officials revealed that no serious breakdowns in the provision of services were recorded as the municipal and local governments had given a high priority to ensuring the continuity of services for the companies in GDD. They recognised that the ease of production activities due to the suspension of public services would cause substantial loss to the investors as well as to the government.

(2) Economically Viable
GDD has performed very well in respect of economic development over the past decade. The success of GDD’s economic development is mainly attributed to a stable, welcoming and regulatory business environment which is supported by a high quality infrastructure network and a set of favourable investment polices that facilitate the process of managing investment. With rapid economic growth, the tax revenue income of GDD increased from 22.9 billion yuan in 1997 to 58.2 billion yuan in 2002, presenting an annual growth rate of around 30% (GDD Statistical Bureau, 2002). During the same period, the fiscal surplus increased from 7.6 billion yuan to 26.2 billion yuan (Guangzhou Statistical Bureau, 2003). The growth in the economy and the increase in tax revenue have enabled the local government to invest in the formulation of domestic fixed capital. The
investment in domestic fixed capital increased from 37.4 billion yuan in 1997 to 54.6 billion yuan in 2002 (Guangzhou Statistical Bureau, 2003).

Notwithstanding the sound economic achievements, the economic development of GDD is facing structural problems in its economic and industrial development. Heavy reliance on the secondary sector and some core industries has weakened GDD’s ability to attract more investment in what is an increasingly competitive environment within the national and global contexts. The imbalance between the secondary sector and the tertiary sector has imposed constraints on the expansion of the tax base. Moreover, it has caused inconvenience to local residents because of the insufficient provision of tertiary services such as retail outlets, restaurants and banks.

To address the imbalance between the secondary and the tertiary sector, the Administrative Committee has introduced a series of measures in the 10th Five-Year Development Plan to increase the proportion of tertiary industry in GDP from 18.7% in 2000 to 30% in 2002. However, this target is considered difficult to achieve as a 10% increase in the tertiary sector took more than 10 years to occur, according to the experience of Guangzhou city.

(3) Socially Equitable
Due to the fact that, over the past decade, GDD has been developed as an industrial zone rather than a community, information in respect of social development is absent. Based on the limited information obtained from site visits and the relevant governmental documents, conclusions are as follows. First, housing is inadequate for the mobile population. Second, appropriate equipment and support services were not available to people with a disability within most public areas of GDD. Third, a comprehensive social welfare and security system has not been established, especially for agricultural residents. Fourth, people are not provided with adequate opportunities to participate in the making of urban development policies. Through the discussion with the local GDD officials, it was found that public participation in policy making had not received attention from the government. This is also evident in the recent literature on the urban development of
China. In a comparative study on the sustainable development of Hong Kong and Guangzhou, Seabrooke et al (2004) point out that little progress has been made in encouraging the active participation of groups such as women, young people, indigenous people and other local communities, although the evolution of the Guangzhou Agenda 21 has led to a relatively liberal degree of public discussion.

(4) Culturally sustainable
The issue of cultural sustainability in GDD has not received attention from the local government for two reasons. First, cultural events are usually held in the old urban area of Guangzhou city. Such situations will not improve until the community and cultural facilities of GDD are substantially upgraded. Second, the development of GDD needs to remove some villages but the traditional cultural value of those villages has not been focused upon. One possible reason for this is that these villages are very common in the Pearl River Delta Region.

(5) Environmentally sustainable
Drainage channels with a length of 632 kilometres and a sewage discharge factory with a handling capacity of 32,000 cubic metres per day have been built (GDD Planning, Science and Technology Bureau, 2003). Moreover, the ‘polluter pays’ principle has been implemented, and industrial users have been charged a high unit rate for electricity and water consumption (GDD Economic Development Bureau, 2003). These measures have contributed to reducing pollution because they address the negative externalities generated by manufacturing activities. However, no precautionary approach has been adopted in the urban development of GDD. During site visits, the GDD officials revealed that environmental impact assessment (EIA) and social impact assessment (SIA) have not been compulsory for major development projects in GDD. Even at the municipal level, the practice of incorporating EIA reports into the planning process was not implemented in urban development projects (Seabrooke et al, 2004). Due to the absence of EIA and SIA analyses, many environmental impacts caused by urban development have been overlooked in policy making.
(6) Institutionally viable

In response to the functional change of GDD to an economic zone and an urban area, the Administrative Committee of GDD has shifted its role from an economic-zone manager to a local government. On the one hand, the Administrative Committee has accumulated rich experience in managing foreign investment which helps promoting an efficient administration. On the other hand, it lacks experience in community management. The evaluative results indicate that several key issues have been overlooked in terms of institutional viability.

First, public participation has not been encouraged in planning policy making. The lack of public participation in policy making has led to increasing difficulties in the implementation of some policies. During the fieldwork in GDD, local officials revealed that a new residential area with comprehensive facilities had been developed for the resettlement of those villagers affected by land acquisition. Finally, they found that this programme was not welcomed by the affected villagers because villagers preferred low-rise houses rather than high-rise apartments.

The second neglected issue is the importance of working in partnership with the private sector in urban planning and management. In past years, the government has played a role as a leader as well as a direct provider in the provision and delivery of infrastructure and services. Cooperation between the public and the private sectors was confined only to project-oriented ad hoc agreements between government and business interests.

Third, action plans have not run in parallel with the formulation of strategies and policies. For example, the integration of economic, social and environmental factors into development has been noted in the Annual Report 2003 of GDD. However, how this principle could be integrated into daily practice was not articulated. As a result of the lack of action plans setting out the performance required to guide implementations, the intended policy objectives are often not met.
Some suggestions to improving urban management in GDD

The urban management framework needs to integrate sector strategies addressing the various problems associated with the development of GDD, and to link actions required to achieve the goals and objectives for each sector. Based on the evaluation results, it is proposed that the current urban management system of GDD needs to make improvements in the following areas:

(1) Institutional change
To facilitate the integration of strategic urban planning and management into the administrative framework, an institutional review to identify appropriate options for institutional arrangements is required. In order to minimise the impact on the operation of the existing structure, an option that is most worth pursuing, is to establish a Strategic Urban Planning and Management Unit (UPMU) reporting to the Director of the Administrative Committee of GDD. The UMPU would have the power to ensure that development policies and administrative units make use of the strategic framework. Under the UMPU, three working groups including Economic Development Working Group, Social Development Working Group and Environmental Management Working Group could be set up to address the relevant sectors. The establishment of a new department or bureau which is responsible for urban management is not worth pursuing because it will have great difficulties in co-ordinating with the existing departments and bureaux. Apart from the creation of the UPMU, continuously strengthening the existing institutional arrangement to integrate more accountability and transparency in decision making is of great importance for the successful implementation of development strategies and policies.

(2) Meaningful involvement of stakeholders
Commitments and inputs from a wide range of public and private organisations and individuals are the key for the successful implementation of strategies and plans. Therefore, before focusing upon the substantive aspects of planning, it is crucial for the
local government of GDD to identify who would be involved in the planning process. The key stakeholders may include governmental departments, government agencies such as consultancy firms employed by the government in urban design, foreign investor organisations, representatives of villagers, urban residents and agricultural residents. Subsequent to the identification of stakeholders, it is important to identify what the roles and responsibilities of the various stakeholders will be, and precisely how they can be involved in the planning process.

(3) Development of public-private partnership
Neither the public nor the private sector alone can address the growing needs for public goods and services of the urban population (UNCHS, 2001). Therefore, the local government should gradually shift its role from being a direct provider to becoming a facilitator in the provision of infrastructure through constructing a strategic partnership with the private sector. Such a relationship would encourage the participation of the private sector in urban development. Moreover, it would enable the local government of GDD to remain small and benefit from private sector innovation and management.

(4) Adoption of scientific tools to help in decision making
Decision support tools such as cost-benefit analysis, social impact assessment and environmental impact assessment need to be introduced, and increasingly promoted in the formulation of preferred strategies. These tools anticipate and identify the possible consequences of the proposed development polices so that measures can be taken to reduce or mitigate the anticipated negative impacts before the implementation of projects (Burdge, 1987; Perkin, 1994 and Classon et al, 1999). The adoption of these tools would help ensure that environmental protection and social equity considerations are fully addressed in development planning decision making.

(5) Development of measurable indicators
Monitoring and evaluation are necessary as strategic planning and management is an ongoing process that involves numerous iterative loops of monitoring and feedback (DAF, 2001). To facilitate effective monitoring and evaluation, a set of measurable indicators is
required to provide quantifiable information, indicating the rate at which change needs to take place in order to move from baseline benchmark to the target benchmark over a specified period of time (Planning Department of the Hong Kong SAR, 2000). A set of well-developed indicators would enable the local government of GDD to examine its actual performance in urban management and then assess the needs for improvement. Moreover, they can assist the government in making comparisons with the performance of other cities.

(6) Promotion of public participation

Public participation is of considerable importance. It would make policies more acceptable to the general public as it would ensure that the development policies are responsive to community views and values. Promotion of public participation in GDD is currently difficult for two reasons. First, it goes against the long-entrenched bureaucratic culture in which the importance of public participation has not been fully recognised and appreciated by officials at various levels of government. Second, more than one third of the population in GDD are agricultural residents. The low educational level of these agricultural residents limits their willingness and capacity to participate in planning and policy making. Therefore, the promotion of participation in GDD would need to be applied in a progressive way, taking the opening of governmental information as a starting point. Efforts made by the local government of GDD to provide electronic access to government services have marked a good beginning in this regard. Enhanced electronic access is good for investors. However, it is inadequate to address the needs of the agricultural residents as they have very limited access to the internet. To make the relevant governmental information accessible to the agricultural residents, strengthening communication with the representatives of villagers through regular meetings is required.

Conclusion

Given the increased rates of urbanisation in China, tremendous challenges have been imposed on local governments as well as the communities to improve their managerial
capacities to cope with the increasing dynamics and uncertainties derived from urban development. To address these challenges effectively, a holistic understanding of the meaning and the substance of urban management is essential for turning the concept of urban management into an operationally workable framework. Given that urban management approaches typically used in many Chinese cities are still influenced by the idea of central planning and characterised by inflexibility, inadequate responsiveness and lack of public participation, a shift of the existing management approach to strategic management is essential, given that it can provide urban management practitioners with a way to enhance capacities in handling changes and volatility. The case study of GDD demonstrates that performance assessment is a core element in using a strategic approach for urban management as it can help in examining and illustrating the needs for future improvement. The discussion in this paper is expected to generate interest in a more thorough understanding of the current urban management practice and hence a more rounded research agenda of the application of strategic urban planning and management in the Chinese context.

Acknowledgement

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