

Social impact assessment and public participation in China: A case study of land requisition in Guangzhou

Bo-sin Tang^{a,*}, Siu-wai Wong^b, Milton Chi-hong Lau^a

^a Department of Building and Real Estate, The Hong Kong Polytechnic University, Hung Hom, Kowloon, Hong Kong, China

^b Division of Social Sciences, Urban Studies and Education, HKU School of Professional and Continuing Education, Hong Kong

Received 25 January 2007; received in revised form 9 March 2007; accepted 11 March 2007

Available online 25 April 2007

Abstract

This study examines the current prospects for and obstacles facing the implementation of social impact assessment (SIA) and participatory planning in the People's Republic of China. During the past two decades, rapid urbanisation and the conversion of rural land for urban development have led to numerous social conflicts and tensions between the Chinese government and its people. SIA and public participation in development decisions have received increasing attention from the Chinese authorities as possible ways to tackle the problem. Based on a Guangzhou case study, this paper argues that the assessment and mitigation of adverse impacts on the community from urban development have been carried out with different objectives, core values and principles when compared with those in Western societies. It concludes that the poor prospects of SIA and collaborative planning in China lie not only in the weak framework for environmental legislation, but also in all institutions concerning state–society relations, the socialist governing ideology and traditional Chinese culture.

© 2007 Elsevier Inc. All rights reserved.

Keywords: Urban development; Social impact assessment; Land requisition; Public participation; China

1. Introduction

Comprising about a quarter of the world's population, the People's Republic of China has entered into the fast lane of urban growth and development. Since the end of the 1990s, its urbanisation rate has increased at approximately 2% per annum. The Chinese government has predicted that the overall level of urbanisation will exceed 50% by the year of 2020 ([The People's Daily Online](#), 6th December 2002). This unprecedented rate

has generated numerous opportunities, but also challenges to the sustainability of urban development. It has brought about significant economic improvement and wealth accumulation, but the unbridled conversion of rural land for industry, housing, infrastructure and urban use rapidly reduced agricultural land resources in China. Between 1996 and 2003, for instance, the total area of arable land in the country decreased dramatically from 130.1 million ha to 123.5 million ha ([Financial Times Information](#), 2004). This inexorable trend of shrinking agricultural land has caused high-level political worries about environmental degradation, national food security and, ultimately, social stability.

Much of the impetus of urbanisation has been engineered and promoted by lower-level governments,

* Corresponding author. Tel.: +852 27665816; fax: +852 27645131.

E-mail addresses: bsbstang@polyu.edu.hk (B. Tang),
ivyswwong@yahoo.com.hk (S. Wong), bsmilton@polyu.edu.hk
(M.C. Lau).

which are competing vehemently for talents, resources and external capital. With greater administrative power and financial autonomy, many local governments have sought to expand their built-up areas by developing “image-building projects” such as extravagant public squares, large city statues and excessive infrastructure (Cao, 2004). As land sale can generate revenue, local governments seek to collaborate with property developers and investors in acquiring and resuming agricultural land for development (Tan and Lu, 2005). During this process, the peasantry has often been one of the most vulnerable and marginalised groups. Lacking legal knowledge and political wherewithal, peasants have inadequate means of defending their interests against land requisition by the Chinese authorities (Cai and Huo, 2002; Cao, 2004). As a result, many have been forced to give up the arable land they have relied on for subsistence, and in return have gained few benefits from urban living. Their traditional lifestyles, customs and culture have been completely destroyed by urban development. Land requisition has become the most common source of tension between the Chinese local authorities and the people. Many disputes have escalated into public opposition, open protest, and even violent conflict, which threatens effective urban governance in China.

The sustainability of urban development in China requires the use of effective planning instruments to cope with the undesirable social impacts of urbanisation. In developed countries, social impact assessment (SIA) is often conceived of as an appropriate tool to tackle such problems. According to Vanclay (2002), SIA helps to address social changes that are invoked by planned interventions to achieve a more sustainable and equitable biophysical and human environment. The experience in many countries has revealed that by involving the public systematically in the process of development decision making, SIA is capable of effectively improving social equity, enhancing social inclusion and mitigating detrimental social outcomes. Seeing this opportunity, many mainland Chinese academics are also advocating the use of SIA in assisting development decisions (Chen, 1995; Jiang et al., 1995; Deng et al., 1996; Dong and Zhao, 1998).

This paper examines the opportunities and limitations of, and obstacles to, the application of SIA in China. It argues that any attempt to expand the formal role and implementation of SIA in China cannot afford to ignore not only the complexity of its social problems, but also the unique historical, structural, cultural and practical barriers to participatory planning in the country. Following this introduction, the paper is

divided into five sections. Section 2 briefly examines the assumptions underlying SIA and summarises its implementation in an international context. Section 3 reviews the progress of assessing environmental and social impacts in China, and evaluates the role of public participation in China’s environmental management. Section 4 presents a case study of development planning in a rapidly urbanizing district in southern China, the Guangzhou Development District, with a particular focus on a recent land requisition project. With reference to the case study experience, Section 5 reflects on the prospect of implementing SIA and public participation in development projects, and evaluates its opportunities and constraints. Section 6 compares the differences between China and the Western societies in engaging stakeholders and assessing social impacts, and finally concludes the paper.

2. International experience

2.1. Origin and emergence of SIA

The origin of the SIA concept can be traced to the 17th century, when scientific analysis was extended to demographic and health impact assessments in the Western societies (Becker, 1997). The enactment of the United States National Environmental Policy Act (NEPA) in 1969 is widely considered as a landmark, after which SIA emerged as a separate statutory field of applied environmental assessment around the world (Burdge, 1990, 2003; Ip, 1990; Rickson et al., 1990a; Momtaz, 2005). In many developed countries, SIA has been fully integrated into the planning process at an appropriate level of jurisdiction to ensure that its findings can unambiguously and effectively feed into decision making, policy evaluation and development programming. This reflects a solid belief that failure to integrate SIA into the planning process diminishes the significance of rational planning and weakens the quality of its ultimate decisions (Rickson et al., 1990b).

Having developed in the West, SIA is underpinned by an interrelated set of modern values and progressive principles such as the formal application of logic, experiential dependency, rationality, individuality and liberal democracy. Based on the definition in the International Principles for Social Impact Assessment, SIA recognises the contributions of a precautionary approach in resolving social problems that can be generated by planned interventions and in improving policy design and implementation (Vanclay, 2003a). SIA also emphasises social equity. It pursues the objective of Pareto optimality, under which no one

should be required to sacrifice their interests for others in the process of development. It pays particular attention to the welfare of minority groups and requires that they should not be disproportionately affected by the environmental impacts of development initiatives. As Vanclay (2002) argues, the role of SIA in developed countries is to protect individual rights in participating in development decision making to shape the future of the community.

Over the past several decades, the functions and contents of SIA have been expanded and enriched considerably in developed countries. SIA has evolved from being a tool to prevent and mitigate the negative impacts of development to one that upholds ethical values such as the protection of human rights, improvement in social equity, institutional capacity building, empowerment and social inclusion (Vanclay, 2006). Consistent with these core values and principles, public participation has become a fundamental component of the SIA process in developed countries. Burdge and Roberson (1990) suggest that effective SIA cannot be meaningfully achieved without appropriate input from the potentially interested parties and the community affected. Similarly, the International Association for Impact Assessment recommends various participatory processes, and highlights the involvement of the public in decision making as an indispensable, ongoing activity in the SIA process (Vanclay, 2003b).

2.2. SIA in the developing countries

In developing countries, SIA is also used in the hope that it will contribute to strengthening social capital and improving community well-being (Henry, 1990; Burdge, 1990; Barrow, 2000; Momtaz, 2005). SIA was initially promoted and advocated by international funding agencies such as the World Bank and the Asian Development Bank. However, its implementation in the developing world has encountered numerous problems. Some developing countries adopt SIA simply as ‘window-dressing’ to comply with the funding requirements of aid donors (Horberry, 1985). This donor-driven approach often severely limits the scope of SIA to extremely restrictive impact assessment, and fails to institutionalise SIA within the planning process to effectively upgrade local administrative capability (Henry, 1990; Momtaz, 2005).

At a structural level, authoritative and monolithic political systems, which are common in the developing world, tend to resist public participation and create many barriers to the effective implementation of SIA (Ip, 1990; Burdge, 1990). The people of many develop-

ing countries are not delegated with actual decision-making power even when the public is involved in the SIA process (Rickson et al., 1990a). At an operational level, the effectiveness of SIA in developing countries is severely handicapped by limited financial resources and insufficient technical capacities, including deficiencies in data-gathering ability, the shortage of competent and locally trained personnel and the lack of an interdisciplinary organisational framework to ensure cooperation between agencies (Burdge and Opryszek, 1984; Ip, 1990; Rickson et al., 1990a; Hong and Luan, 1999; Li and Li, 1998; Jain et al., 2002). These experiences reflect the complexity of transplanting SIA from a mature context into a setting in which the political, social and cultural structures are different.

3. Social Impact Assessment and public participation in China

3.1. Historical development

The environmental impacts of development projects have been assessed for more than 30 years in the People’s Republic of China. However, as a planning tool, SIA is relatively new to Chinese environmental planners and, at present, it is subsumed under environmental impact assessment (EIA). The formal concepts of environmental assessment and impact mitigation were introduced to China in the early 1970s from the West (Li and Li, 1998). In 1979, the enactment of the *Environmental Protection Act of the P.R. China (for Trial Implementation)* required mandatory EIA submission to the environmental protection departments for approval before the commencement of all construction projects undertaken by all enterprises (*qiye*) and administrative work units (*shiye danwei*). Although the Act did not stipulate the EIA procedures in details, it nonetheless set a milestone leading to the gradual implementation of environmental assessments in China’s development projects. As a consequence, the significance of environmental protection and mitigation with the support of EIAs made tremendous progress in the 1980s and 1990s (Bao et al., 2004). By 1998, the Chinese government enacted 6 environmental protection laws, 34 administrative regulations, and more than 90 departmental regulations, and acceded to 37 international environmental treaties (Editorial Board of China’s *Environmental Protection*, 2000).

From the late 1990s, the contents of EIA in China began to gradually shift from being physically-oriented to being more socially-focused (Chen, 1995). International funding agents were the principal driving force

behind this shift (Chen, 1995; Dong and Zhao, 1998; Li and Li, 1998). EIA requirements, embodied as part of the conditions for project funding by the international organisations, prompted China to promulgate the *Notice on Strengthening the Management of EIA for Construction Projects Funded by International Financial Organisations* in 1993. This Notice explicitly required that EIAs for all funding projects had to comply with not only the national environmental laws and regulations but also the requirements of international funding agents. The assessment of social issues and community impacts was always a condition of international aid, and hence the inclusion of public participation and the assessment of social impacts began to play a part in local projects (Jiang et al., 1995).

In 2003, the promulgation of the *Environmental Impact Assessment Act of the P.R. China* further elaborated on the scope and procedures of an EIA process. The relevant provisions included, for example, the type of development planning and projects that requires an EIA, the major contents of an EIA report, and the hierarchy of authorities for approving EIA submissions. Following this Act, EIA requirements are enforceable at both policy and project levels. Local governments at the municipal and provincial levels are now required to base their development decisions on the EIA results. Therefore, the Act has set the legal cornerstone for an official adoption of environmental management at a strategic level in China (Bao et al., 2004; Tao et al., 2007). However, the Act has not clearly specified how social issues are to be formally and separately addressed in an EIA, so the prospect of implementing an SIA is still an open question.

3.2. Public participation in environmental management

Alongside the growth of environmental assessment, public participation in China's environmental protection has made some progress during the past two decades. New laws and policies, especially at the national level, have been announced to promote, confer and formalise the rights of community involvement in planning and managing environmental issues arising from urban development. The rights of the Chinese people to participate in the management of national affairs (including the social, economic and cultural dimensions) are formally conferred by the *Constitution of the PRC* (Ma, 1998; Hao and Li, 2004). The individual right to participate in environmental management is also stipulated in the *Environmental Impact Assessment Act* (enacted in 2003) and other complementary legislation (see Table 1).

Nonetheless, these legislative provisions for public participation are still confined to abstract and high-sounding principles. For example, the *Environmental Protection Act 1989* stated briefly that all work units (*danwai*) and individuals (*geren*) had the rights to report (*jianju*) and to take prosecuting actions against other “*danwai*” or “*geren*” that were polluting the environment. The *EIA Act 2003* also specifically encouraged the involvement of work units, experts and the general public in environmental assessment. However, such laws often failed to elaborate on the operational and procedural details, which were subject to interpretation and manipulation (Hong and Luan, 1999). The deficient details included, for example, identifying who should be involved in an impact assessment, when to initiate it, how to communicate the assessment results and how to involve the public at the local level. The underdevelopment of the legal profession in China is another factor that impedes the steady growth of community involvement and the protection of individual rights amidst development (Hong and Luan, 1999). The existing legal system in China has been in place since the early 1980s. However, due to the meagre number of lawyers and the dearth of privatised legal services (Tang et al., 2006), the general public has had difficulties in procuring the legal services to defend its interests, even though such rights have been well documented in law. Consequently, it is rather doubtful that these laws and policies can be effectively enforced to safeguard the actual exercise of the rights of the public in environmental decision making.

In recent years, China's strategic development planning has moved towards a market-led and participatory approach with an objective of creating a more inclusive and harmonious community environment. In so far as environmental protection is concerned, the *Eleventh Five-year National Plan* proposed that new legislation should be introduced to ensure adequate public access to environmental management. However, the stated aim of expanding the involvement of the public in development planning has met with widespread suspicion because it tends to go against the long-entrenched bureaucratic culture of China's authoritarian state. The benefit of public participation in development decisions is often not fully recognised by local officials (Xu and Ding, 2005). A “limited” participatory model that is being implemented in many Chinese cities is underlined by the assumption that the public still lacks the knowledge and capacity to participate in policy formulation and decision making (Li and Li, 1998). Such an assumption has led to an “expert-cult” (*zhuanjia chongbai*) phenomenon in Chinese development planning, especially in the field of environmental protection,

Table 1
Major laws and policies governing public participation in environmental management

Year	Law/event	Descriptions in Pinyin	Provisions
1954	The Constitution of the PRC	<i>Xian Fa</i>	The Constitution stipulates: “all rights of the PRC belong to the people... The people can participate in managing national, economic, cultural and social affairs in accordance with laws.”
1973	The First National Conference on Environmental Protection	<i>Diyici Quanguo Huanjing Baohu Huiyi</i>	In this conference, a slogan “Comprehensive planning, comprehensive layout, comprehensive reuse, recycling wastes, protecting environment through public participation and action (yikao qunzhong), and creating well-being for people” was highlighted as the national policy for environmental protection.
1979	Environmental Protection Act (for Trial Implementation)	<i>Huanjing Baohu Fa (Shixing)</i>	Section 1.8 stated that all working units (<i>danwai</i>) and individuals (<i>geren</i>) had the rights to report (<i>jianju</i>) and to take prosecution actions against “ <i>danwai</i> ” or “ <i>geren</i> ” who caused pollution to the environment.
1983	The Second National Conference on Environmental Protection	<i>Dieci Quanguo Huanjing Baohu Huiyi</i>	Environmental protection is adopted as one of the national policies to achieve unity of economic, social and environmental benefits in national development (Editorial Board of China’s Environmental Protection, 2000).
1989	Environmental Protection Act	<i>Huanjing Baohu Fa</i>	Section 1.6 stated that all work units (<i>danwai</i>) and individuals (<i>geren</i>) had the obligations to protect the environment and the rights to report (<i>jianju</i>) and to take prosecuting actions against “ <i>danwai</i> ” or “ <i>geren</i> ” who caused pollution to the environment.
1993	Notice on Strengthening the Management of EIAs for Construction Projects Funded by International Financial Organizations	<i>Guanyu Jiaqiang Guoji Jinrong Zuzhi Daikuan Jianshe Xiangmu Huanjing Pingjia Guanli Gongzuo de Tongzhi</i>	Section 7 stated that public participation was an important part of EIA to ensure that the interests of affected parties and social groups were reasonably considered and compensated.
1996	Action Plan on National Environmental Publicity and Education	<i>Quanguo Huanjing Xuanchuan Jiaoyu Xingdong gangyao</i>	The Action Plan advocated the establishment of a mechanism for the practical implementation of public participation in environmental management.
1996	Water Pollution Prevention Law	<i>Shuiwuran Fangzhi Fa</i>	Section 1.6 stated that all work units (<i>danwai</i>) and individuals (<i>geren</i>) had the obligations to protect water resource, and rights to report (<i>jianju</i>) and to take prosecution actions against “ <i>danwai</i> ” or “ <i>geren</i> ” who caused pollution to water resources.
1999	Symposium on Population, Natural Resources and Environment	<i>Renkou Ziyuan Huanjing Zuotanhui</i>	Four rules were introduced for environmental protection: (1) linking environmental protection with development decision-making; (2) unify supervision and management by environmental authority; (3) enhance investment in environmental protection; and, (4) ensuring public participation.
2003	Environmental Impact Assessment Act	<i>Huanjing Yingxiang Pingjia Fa</i>	Section 1.5 encouraged the related work units, experts and the general public to participate in the EIA process. Section 1.11 stated that the opinions of those related work units, experts and the general public should be consulted before the approval of development projects.
2005	“The Eleventh 5-year Plan” — A plan for the Development of National Environmental Laws and Regulation	<i>“Shiyiwu” Quanguo Huanjing Baohu Fagui Jianshe</i>	Chapter 2 proposed that a new regulation in respect of “Public Participation and Environmental Protection” addressing the existing deficiency in legislation should be introduced to regularize the integration of public participation with environmental assessment.

which usually involves extensive professional and technical knowledge (Li, 2004; Qian et al., 2004; Zhang and Chen, 2004). It has been a common practice of project proponents to simply seek the opinions of a few “experts” rather than the views of the general public in the assessment process (Zhao, 2005). This is

completely different from the Western assumption that individuals best understand their own needs, and that the involvement of local people can significantly contribute to better development planning if there is adequate opportunity to do so. Therefore, as Meissner (1999) noted, socialist China is identifying suitable foreign

models to make the existing governance system more liberal and effective, but not necessarily more democratic in a Western sense.

Against this background, significant barriers against effective public participation in environmental management still exist in China, underpinned by an intertwined mix of economic liberalism, the socialist governing ideology and traditional Chinese culture (Jiang and Zhou, 2004). The following case study will illustrate this point.

4. Case study: land requisition for urban development in GDD

The Guangzhou Development District (GDD) is a rapidly urbanising and industrialising area in the city of Guangzhou in southern China. The requisition of adjacent village land for the development of Guangzhou Science City (GSC) in the GDD took a period of less than a year. Compared with many other land assembly cases in China, this government action was regarded as “highly successful” because there were no violent clashes between the authorities and affected villagers. Most villagers were peacefully removed from their old villages (Fig. 1) and relocated elsewhere. This section reviews the experience of the GDD officials in dissolving potential social conflicts in the process of village relocation, followed by an evaluation of the opportunities and challenges that confront the application of SIA and the prospect of public participation in China.

4.1. Development trajectory of GDD

The GDD is located in the east of Guangzhou City, which is the economic, cultural and political centre of southern China. With a land area of more than 215 km²,

Table 2
Administrative areas of GDD

Zones	Section	Year of establishment	Planning area (km ²)
GETDD	West Section	1984	6.6
	East Section	1993	15.2
	Yonghe Economic Zones	1993	37.6
GHIDZ	Guangzhou Science City	1998	45.5
	Guangzhou International Biological Island	2001	1.8
	GFTZ	1992	2.5
GEPZ		2000	3.05
Luogang Street	Luogang Street	*	74.2
Administrative Office	Haungbo Company	*	21.4
	Lingtou Company	*	10.8
Xiagang Street	Bigang Community	*	5.9
Administrative Office	Yushu Village	*	1.0

Total area: 215.25 km² (excluding overlapping area among all sections)

*Included into GDD's administration in 2003.

Source: GDD Administrative Committee (2004).

the GDD comprises four separate development zones that were initially set up as enclaves for attracting foreign investment and promoting exports (see Table 2 and Fig. 2). The first development zone in the GDD (the Guangzhou Economic and Technological Development District) was established in 1983. To upgrade the investment environment of the district, three other development zones (the Guangzhou Hi-tech Industrial Development Zone, the Guangzhou Free Trade Zone and the Guangzhou Export Processing Zone) were created in the 1990s to provide a wider range of facilities and services for investors in the areas of trading, industrial storage, material logistics and processing and manufacturing.



Fig. 1. Old village before land acquisition. Source: Authors.

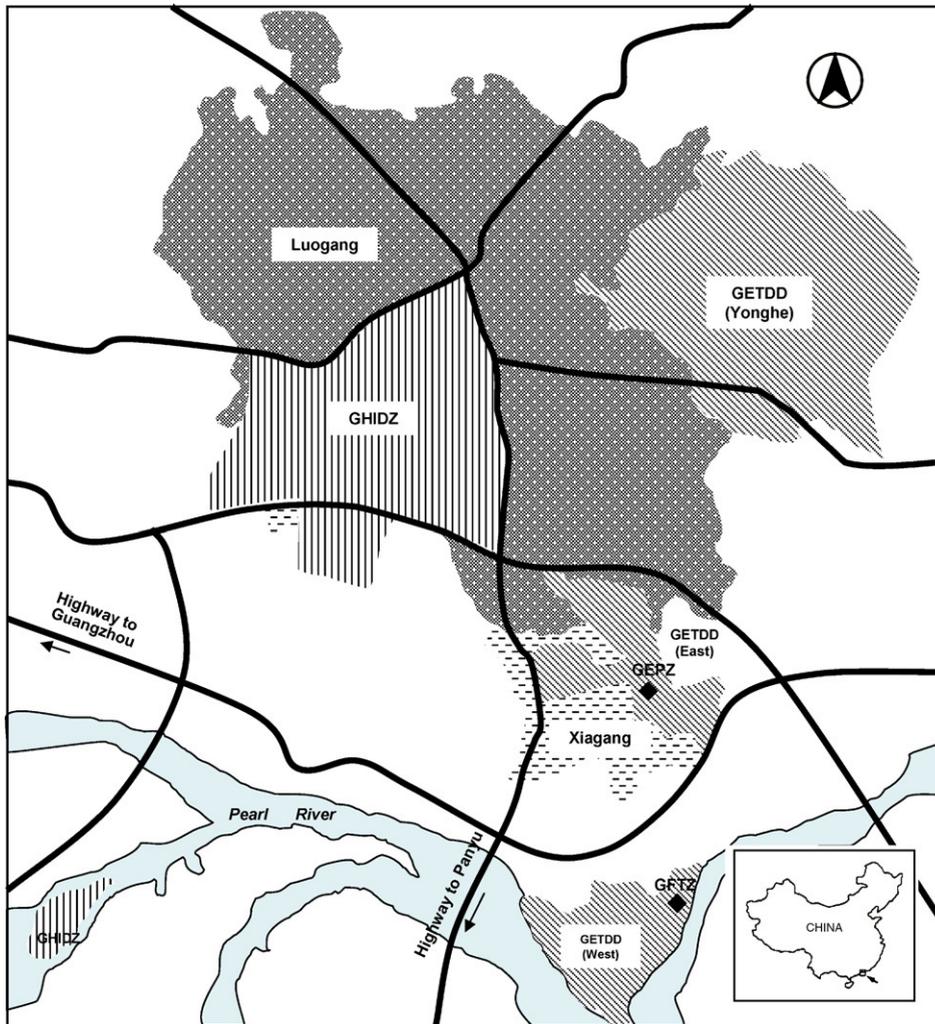


Fig. 2. Location of GDD and its main administrative districts. Source: Authors' drawing based upon GDD information.

Providing preferential tax breaks and other investment privileges to external investors, these specially-planned industrial zones achieved significant success in

utilising foreign direct investment during the 1980s and 1990s (Table 3). Facing an increasingly competitive global environment after China's accession to the World

Table 3
Guangzhou development district: key statistics

Year	Gross domestic production value (billion RMB)	Contractual utilisation of foreign capital (10 thousand USD)	Actual utilisation of foreign capital (10 thousand USD)	Industrial output value (0.1 billion RMB)	Economic structure			Fixed assets investment (0.1 billion RMB)	Aggregate export volume (10 thousand RMB)
					Primary (%)	Secondary (%)	Tertiary (%)		
2003	423.19	226,428	60,647	895.87	0.3	78.3	21.1	90.18	322,570
2002	244.74	208,774	55,988	560.52	0	79.1	20.9	58.23	187,615
2001	203.32	131,730	52,649	446.61	0	84.7	15.3	28.29	114,449
2000	149.39	93,206	54,727	351.74	0	81.3	18.7	23.62	106,693
1999	112.65	80,854	66,003	273.61	0	75.8	24.2	33.49	75,718

Source: GDD Statistical Bureau (2002).

Trade Organisation, the GDD managed to combine these four stand-alone industrial zones in 2002, re-orientating the development strategy to that of being a fully integrated part of an urban region (Wong and Tang, 2005).

In 1998, with the support from the Guangzhou Municipality, the GDD Administrative Committee (the local government of the GDD) launched the GSC project with an objective of building a modern urban area for hi-tech industry development. With a total developable area of 34.75 km², the GSC not only constituted a substantial extension of the GDD's administrative boundaries, but also became an integral component of the metropolitan development plan of Guangzhou City. Pursuant with the development strategy at the municipal level that was described as "exploration in the south, optimisation in the north, extension in the east and coordination in the west", the development of the GSC was expected to act as a "flagship project" by turning the GDD into a new eastern urban sub-centre of Guangzhou.

4.2. Land requisition for GSC development

To support the construction of the GSC, the GDD officially announced in 2004 a programme of relocating several villages that were within the planning boundaries of the project. Phase 1 of the relocation programme affected 705 households in *Yushu*, *Huangbo* and *Luo-gang* villages. A cross-departmental working group of about 50 members headed by the Director of the GDD Administrative Committee was set up to manage and coordinate the programme. The process of land requisition involved the following procedures.

4.2.1. Promulgation of regulations and policies

The existing laws did not provide detailed regulations and guidelines for compensation and village resettlement. Therefore, to ensure the legitimacy of land resumption, the GDD authority had to work out its own compensation and resettlement policy. The work of drafting the relevant guidelines and regulations commenced in May 2004 and, given the tight implementation schedule, officials were rushed in preparing a detailed set of rules and policies. Three governmental departments, including the Planning and Land Resources and Construction Bureau, the Policy Research Office and the Land Development Centre, were pulled together to conduct a preliminary survey of the three villages affected to obtain general information about property ownership and household status. Based on the survey results and with reference to the general

legal framework,¹ several draft proposals for compensation and resettlement were prepared. These proposals were then circulated and tabled for discussion within the governmental departments. Village representatives were also involved in this discussion stage to test their initial reactions. In August 2004, the selected proposal was formally incorporated into the *Implementation Methods for Compensation and Resettlement Issues in Relocating Villages for GSC (Kexiecheng Cunzhuang Banqian Buchang Anzhi Shishi Banfa)* (the 'Implementation Methods' for short) to provide an administrative basis for resuming the land and relocating the villages for this project (see Table 4).

4.2.2. Project staff training

Before the commencement of project fieldwork, a four-day training workshop was organised for the project staff, local officers and village leaders. This workshop had two key objectives. First, it familiarised the participants with the strategic mission of the GSC project, the policy intention behind land resumption and village relocation, and the operational implications of the relevant compensation rules and regulations. The second objective was to gather the opinions of the villagers on the resumption programme through their village leaders. Therefore, during the workshop, a particular emphasis was placed on examining the legal matters and equity issues surrounding land resumption, compensation and relocation. The questions and concerns raised by the villager representatives were recorded, discussed and fed into the improvement of the programme.

4.2.3. Publicity and propaganda

The relocation of villages implied that the villagers would be forced to leave their farmland which they and their ancestors may have relied on as a means of subsistence and survival for centuries. Strong resistance from the villagers was expected because the relocation would lead to an irreversible and fundamental change in their customs, traditions and ways of life. The GDD authority was fully aware that it would be impossible for the relocation programme to succeed if these worries and concerns were not properly settled. To tackle this problem, the GDD authority carried out extensive publicity campaigns at an early stage of the project.

¹ The relevant laws include the *Land Management Law of the PRC* at the national level, the *Implementation Method for Land Management Law* at the provincial level and the *Management Regulations for Village Land Use in Guangzhou* at the municipal level.

Table 4
Key provisions of the *Implementation Methods*

Section	Key provisions
Aims (Section 1)	<ul style="list-style-type: none"> – to speed up land exploration for the construction of GSC; – to make proper arrangement for compensation and resettlement caused by the relocation of villages; and, – to protect the legal interests of villagers.
Implementation agency (Section 3)	– GDD Land Development and Construction Centre (<i>Kaifaqu Tudi Kaifa Jianshe Zhong Xin</i>) was responsible for (1) working out acceptable compensation packages in according with this Implementation Methods; and, (2) negotiating and reaching agreements in respect of compensation and resettlement issues with the affected villagers.
Assessment of Compensation (Section 5)	<ul style="list-style-type: none"> – Affected owners were entitled to compensation assessed on the basis of the re-provisioning of their housing properties; and, – the assessment had to be conducted by qualified property appraisal firms appointed by the GDD Land Development and Construction Centre.
Resolving Assessment Disputes (Section 6)	– If affected owners were not satisfied with the compensation assessment by the appointed appraisal firm, they can negotiate with the GDD Land Development and Construction Centre to appoint another appraisal agent for reassessment.
Home Purchase Scheme (Sections 16 & 17)	<ul style="list-style-type: none"> – The home purchase scheme was designated to permit the affected households to purchase a new flat (not more than 240m²) in the relocation sites constructed by the government. – The average construction of new flats in relocation sites was 1400yuan/m², and the average selling price would be set at 1000yuan/m².
Ex-gratia Payment (Section 27)	– An ex-gratia allowance at the rate of 5000 yuan for each family member would be made for those affected owners who agreed to surrender their housing properties voluntarily.

Source: GDD Administrative Committee (2004).

These publicity activities were mainly conducted in two ways: (a) by publicizing the land requisition programme through various means such as project brochures, television, newsletters and notice boards in villages; and (b) by holding public meetings and home visits to explain to the villagers about the *Implementation Methods* and the long-term benefits of the GSC project to the development of the GDD.

4.2.4. Housing conditions surveys

Unclear property rights and the uncertain ownership status of existing village houses presented major problems to the assessment of compensation. Following the publicity campaign, the GDD carried out extensive and detailed housing condition surveys to ascertain the ownership titles and confirm the physical conditions and floor areas of each resumed village house. The relevant data obtained in these surveys were to be used as the basis for compensation assessment. To demonstrate fairness and transparency, the GDD deliberately posted the survey results on public notice boards for open inspection by the villagers. Furthermore, the survey findings contributed to the revision and enhancement of the compensation policy. Based on more detailed survey results, the working group of the GDD was able to rectify previous loopholes in its initial set of compensation regulations by introducing the *Supplementary Regulations of the Implementation Methods*, which provided better, comprehensive guidelines for compensation assessment.

4.2.5. Signing agreements for title transfer

The above publicity and implementation efforts contributed enormously to the villagers accepting the land requisition programme. By October 2004 – only about five months after the project commenced – about 30% of the households in *Huangbo Village* and 15% of the households in *Luogang Village* signed agreements for property title transfer and compensation. Villagers were encouraged to make quicker decisions in accepting the compensation and resettlement offers. To expedite this process, the GDD put forward a policy “teaser” under which the amount of ex-gratia payment would be increased for earlier acceptance before the final deadline. By January 2005, the percentage of households that had signed agreements reached 80% in *Huangbo Village* and 75% in *Luogang Village*. After further rounds of campaign activities and continuous efforts of the working group, more than 95% of households had signed title transfer agreements by March 2005.

4.3. Success factors in GDD land requisition

4.3.1. Effective publicity and campaign

Effective campaigning was one of the crucial factors in the success of the programme. At the outset, the GDD authority strategically targeted the village leaders as a focal group before commencing any relocation activities. This was imperative because, under the Chinese clan system, village leaders performed extremely important functions in mediating disputes, adjudicating conflicts

and managing village development affairs. The attitude of village leaders towards government policies had a material bearing on the ultimate decisions of their fellow villagers. Apart from the village leaders, another target group comprised GDD officials who either came from the affected villages or had close relatives living there. These two key groups were invited by the GDD to attend a series of “ideological and moral education” programmes that communicated to them the rationale and benefits behind the GSC development. These were considered as essential “mind-engineering” activities that helped to win the support of these leaders in spearheading and implementing the actual land requisition programme.

At the initial project planning stage, communication was mainly top-down. By means of intensive contact and education, the village leaders and local officials began to share the mission of the proposed GSC project. They were brought to side with the GDD in agreeing that such a development would be compatible with the long-term interests of the villagers. As a result, some took the initiative of promoting the village relocation programme and serving as the bridge of communication between officials and the affected villagers. Their significant influence on villager decisions was evidenced by the fact that their persuasion led about 20% of the total affected households, which mostly comprised their families and relatives, to accept relocation and compensation offers promptly.

4.3.2. Transparency and consistency in relocation and resettlement

The GDD recognised that it was important to uphold the principles of transparency and uniformity in implementing the relocation and resettlement programme. This would avoid unnecessary misunderstandings and grievances from the villagers. They pursued this objective in a number of ways. First, the compensation and resettlement package was offered in strict compliance with the *Implementation Methods* that were announced publicly. Second, the results of the housing condition surveys, which formed the basis for compensation assessments, were posted in the villages for open inspection. Moreover, a telephone hotline was set up to answer villager enquiries and complaints on individual compensation assessments and resettlement arrangements.

The working group also took a stern approach in dealing with cheating in compensation claims. In a review of compensation assessments, the working group discovered that some households in *Yushu* Village provided false statement or concealed material information so they could qualify for more compensation. The working group took immediate steps to disqualify these

households from obtaining the higher amount of compensation to ensure fairness. It then revised the relevant regulations to fill the loopholes caused by the deficiency of previous housing surveys and the ambiguities of some provisions in the *Implementation Methods*. The working group also devoted great efforts to persuading the cheating households to return the excess compensation granted to them. The dissatisfaction of the other villagers who faithfully followed the rules was quickly dispelled. Through these measures, the GDD officials effectively demonstrated their commitment to equitable and consistent compensation policies, and won the confidence of villagers.

4.3.3. Eliminating the influence of the mass media and lawyers

The GDD succeeded in controlling the undue influence of the mass media and lawyers on the villagers during the relocation project. During the resumption period, some villagers read an article in a local newspaper which reported that a comparatively higher amount of compensation was provided in another land requisition case in Guangzhou City. This small incident severely weakened their trust in the compensation policy; some villagers even withdrew their acceptance of compensation and resettlement packages. To tackle this unexpected crisis, the working group immediately held meetings with the disgruntled villagers to explain the rationale behind the differences in compensation offers for different cases in Guangzhou. This prompt response, coupled with the patient and caring approach taken by the GDD officials, served to regain the understanding of most villagers.

Yet, some 20 households remained unsatisfied with the government explanations. They then pulled together financial resources and appointed a lawyer to take legal action against the GDD. In a Western context, this lawsuit would probably have ended up in court. But in this case, GDD officials proceeded to persuade the lawyer to give up his appointment and cease to act on behalf of the villagers. The working group considered that the appointed lawyer did not fully understand the case and might mislead the villagers about the chance of winning the lawsuit. As lawyers are ideologically designated as “legal practitioners” of the state in China, the efforts of the GDD officials convinced the lawyer to withdraw from the appointment.

4.3.4. Dedications and affiliations of local leaders

Dedication of the local officials and project staff underlined the success of the land requisition and resettlement programme. The GSC development project

received high attention at a policy level. Municipal and local officials perceived that this flagship project would have strategic implications for the future development of the GDD. As such, full political, administrative and resources support were earmarked for the programme. The formation of a cross-departmental working group comprising senior local officials headed by the GDD leaders was a case in point. This working group was formed to supervise and monitor the work that was associated with village relocation and resettlement. During the project, the GDD leaders and many senior officials frequently went into the villages and paid home visits to the frontline project staff and villagers. These actions motivated the frontline staff enormously and thus secured their dedication to serve the villagers.

In China, field visits of top leaders serve both material and cosmetic functions. On the one hand, they provide an opportunity for leaders to obtain first-hand experience of the views and worries of villagers, and more responsive measure can be adopted. This also allows senior leaders to directly monitor the work progress of their frontline staff. That is important because, given the myriad hierarchical structure of Chinese bureaucracy, senior leaders are often segregated from the masses and their grassroots affairs. The visits were also significant political gestures that demonstrated the close ‘emotional’ affiliation of the leaders with the villagers. Their dedication and caring attitudes served to win the hearts of the villagers and helped to reduce hostility to the relocation programme.

5. Prospects for SIA and public engagement in China: opportunities and constraints

5.1. Opportunities

The GDD experience can be regarded as a microcosm of the development situation in mainland China. A number of favourable factors support the GDD and other Chinese development authorities in formally expanding the use of SIA. For instance, rapid industrialisation over the past two decades has created an economically affluent community that can now afford to allocate economic resources for social and environmental impact assessments. Moreover, environmental protection and sustainable development have a rising profile in China’s development strategy. Local decision makers in many Chinese cities are increasingly aware that creating an ecologically sound and socially harmonious environment is essential for complying with modern values, attracting talents and external investors, and achieving sustainable urban development.

Furthermore, the concept of Strategic Environmental Assessment (SEA) is now being advocated and encouraged at the national level. Compared with traditional EIA/SIA, SEA is more policy-oriented (Becker, 1997, 2001) because it examines possible development problems at the policy level rather than the project level to broaden the scope of assessment at an earlier stage of development planning (Bao et al., 2004). Part of this includes the assessment of social impacts and the development of socially sustainable policies. This implies that the GDD and other local Chinese authorities are in a complimentary policy setting that can promote community involvement and public participation in managing social and physical environments. Many imminent social problems that are caused by land acquisition and village relocation in China, such as the inadequate provision of urban employment and social security for affected villagers, can no longer be ignored by the Chinese leadership. The importance of resolving these social problems at the early planning stage, before they grow to wreck the socialist regime, has largely been accepted by the Chinese bureaucracy. All of these factors create an opportunity for local governments to expand the use of SIA in strategic development planning and environmental decisions.

Indeed, the GDD is probably in a stronger position than similar organisations in China. First, it inherited a relatively simple and lean organisational structure from its former role as the manager of an economic zone. The GDD is staffed by dedicated officials who are used to providing efficient administrative services to foreign investors. They are versatile and open to external, progressive ideas. Second, the local government of the GDD has vowed to transform itself into a ‘learning organisation’ and increase its management and governance capacity. Many professionals from various disciplines are being recruited to work in the government. They are keen to learn and adapt international experiences to the development planning of the GDD. Public participation, community empowerment and SIA are some of these international concepts and practices that the GDD will have to consider if it wants to adopt international best practices.

5.2. Constraints

Nonetheless, the application of SIA may encounter the following notable obstacles.

5.2.1. Lack of legal and administrative back-up

The absence of a statutory framework and administrative procedures at the local level to fully integrate with national environmental protection policies and environmental management laws is a major obstacle in

the promotion of SIA. An integrated legal and administrative framework at the local level requires the following major components. First, the benefits of environmental and social assessments for sustainable urban development must be fully recognised by local officials. Second, because SIA remains a part of EIA in China, a set of regulations that is compatible with national laws must clearly identify the actual scope of and exact procedures for assessing the social impacts of development projects. Third, the authority and responsibilities of environmental protection departments in approving SIA submissions and enforcing SIA results must be clearly defined. Moreover, they should be fully sanctioned by local regulations to ensure effective implementation and enforcement.

In China, the general principles of environmental policies and legislation are well set out at the national level. However, as in the case of the GDD, the development policies of many local governments are heavily biased towards enhancing administrative expediency and facilitating foreign investment, and legal and administrative frameworks to integrate social and environmental issues with urban development planning are absent (Wong et al., 2006). The GDD has established an environmental protection unit known as the Comprehensive Environmental Management Bureau (*Huangjing Zhonghe Guanliju*), which is responsible for carrying out EIA in its development projects. However, in the GDD case, when a senior-level project decision was already made and project implementation was accorded the highest work priority, the EIA prepared by the Bureau was nothing more than a formality to justify the project.

Furthermore, as most mainland Chinese officials are unfamiliar with environmental assessment and the relevant assessment tools, the establishment of an integrated legal and administrative framework to support SIA implementation may encounter foreseeable difficulties. Many officials generally perceive that EIA and SIA are obstacles rather than incentives, and do not consider them capable of adding value to the development process (Cao and Long, 2004). In the GDD relocation projects, for instance, formal EIA/SIA analyses were not undertaken. This was because the local officials did not fully recognise the substance of impact assessments and were worried about causing delays to the development project.

5.2.2. *Influence of Chinese planning ideology and development strategy*

As demonstrated in the GDD land requisition case, there were several limited ways of engaging and

involving the affected villagers. These included public meetings, hotlines, suggestion boxes, representation by village leaders and so on. In fact, the GDD was rather “benevolent” and transparent in its dealings when compared with many of its counterparts elsewhere. The affected villagers were given open access to information about their compensation and resettlement arrangements. Yet, the purpose of this sort of public participation was aimed at compliance rather than consultation. The GDD Authority encouraged the villagers to participate in the process in the hope that they would then support the land requisition programme and all opposition could be removed. Community involvement was not directed towards identifying alternatives and minimising any adverse impact of the development project. When public participation and consultation are used to justify already-made project decisions rather than informing decision making, it is very difficult to see how SIA can be effectively implemented (Ip, 1990).

The lack of political will in promoting effective public participation in the GDD’s land requisition case had its roots in the concept of master blueprint planning in China. Before the early 1980s, China was a centrally planned economy in which the state had absolute power in coordinating resource allocation. Social interests were laid out in a top-down hierarchical structure with a priority extending from national interests, to collective interests and finally to individual interests. Under such an authoritarian regime, the social interests of the mass were unilaterally determined by the state. Individuals were required to “sacrifice” their personal interests for the national/collective interests when the former came into conflict with the latter (Li, 2004; Xu and Ding, 2005). This concept of public interest is completely different from the fundamental value embodied in SIA in the West, which stipulates that individual rights must not be trespassed or sacrificed for the interests of others.

The Chinese government has championed the ideas of “collectivism”, “serving the mass” and “national interests” in its ideological and moral education programmes for years. Hence, these principles have largely infiltrated China’s planning ideology. Although the market liberalisation policies in recent years have served to elicit a heightened awareness about private and individual rights in Chinese society, the promotion of collective interests still has its strong moral appeal, especially in the rural context. In the GDD land requisition case, the principle of achieving collective interests clearly underlined the focus of the publicity activities conducted by the GDD officials. Apart from assuring the villagers of reasonable compensation, the

GDD officials also expended a great deal of effort in convincing them that their “sacrifices” were part of a wider, long-term benefit of the development of the GDD as a whole.

5.2.3. *Influence of Chinese traditional culture*

Low education level is another obstacle that restricts the capacity of villagers to participate in decision making about urban development. The influence of the Chinese culture also has an impact on villager responses in the process of village relocation. Among the hundred schools of traditional Chinese philosophy that originated from the late Spring-and-Autumn and early Warring States periods (about 2500 years ago), Confucianism and Daoism have evolved to exert dominant influences in framing Chinese culture and its daily practices.

Confucianism places emphasis on civilisation, loyalty to the emperor, universal love and equality amongst people. It supports an ethical system of social relations governed by rules of propriety that existed during ancient China’s dynasties. Under this system, each person’s place in society is carefully defined by moral standards to ensure the harmony of social relations rather than individual rights. Confucianism is fundamental to but does not monopolise Chinese culture and philosophy. Chinese culture is also substantially shaped by Daoism, which is a belief in simplicity and the nature of a self-correcting universe. Daoism emphasises that the immortality of human beings exists precisely in their harmony, stability and warm emotional relationship with nature. Under the influence of Daoism, human beings, although important, are never the commanders of nature.

Cultivated by a mixture of Confucianism and Daoism, traditional Chinese philosophies are ethical and aesthetical as opposed to the logical and scientific culture of the Western societies. Traditional Chinese culture does not ostensibly resist democratic development. But a community structure that has the willingness and capacity to participate in governmental decision making has been absent in China’s development history. Most Chinese people, especially the peasants, are used to believing that a strong centralised government is essential to protect their welfare. Many Chinese people tend to entrust their well-being to government officials and expect to encounter benevolent and sympathetic officials who can understand and fight for their needs (He and Zhao, 1999). Such an inclination has not been downplayed, especially in rural China, even as urban development in many cities has made them more modernised and prosperous in recent years.

The GDD land requisition case involved a unique approach to handling social issues that are associated

with urban development in China. The approach mainly involved developing sympathetic and caring policies that were adapted to tally with the cultural and ideological traditions of the villagers. These policies were mainly conveyed and implemented through local officials who either came from the resumed villages or had close family relationships with the residents there. This was clearly in great contrast with the Western practice, in which related parties are not usually involved to avoid conflicts of interest. When we associate the GDD approach with the traditional ideology of Chinese villagers, it is not difficult to understand why such policies could win the hearts of villagers and gain their support in land requisition cases.

6. Conclusions

This study has explored the current status and prospects of social impact assessment (SIA) and participatory planning in the People’s Republic of China. Market liberalisation and the openness of China have led to a rapid transformation of its economy and society during the past two decades. The increasing integration of China with the outside world has not only enhanced its economic performance, but has also made China more receptive to many progressive social values of Western societies. Environmental protection, impact assessments and public participation are just a few examples of the Western concepts that exert increasing influence on various practices of the Chinese government in connection with urban management, strategic development and project planning. With growing affluence and improved access to information, the Chinese population is generally more attentive to its well-being and its right to a better environment. All of these factors tend to provide fertile ground for an expanded role of formal SIA and participatory planning in the urbanisation of China.

Nonetheless, that prospect is rather slim at the moment. In China, SIA does not have an independent legal status. It is currently a planning activity subsumed under environmental impact assessment (EIA). Although EIA has made some progress in development planning in China during recent decades, it remains a rather new planning tool to the authorities. A comprehensive and enforceable legal framework to support the implementation of EIA/SIA is still wanting. As many local governments are adamant in support of economic development and progress, the influence of impact assessment results on actual policy decision making appear to be limited. In many circumstances, for the sake of administrative convenience and bureaucratic

Table 5
Comparison of social impact assessments: developed countries and Mainland China

Comparison	Developed countries	Mainland China
<i>Objectives</i>	<ul style="list-style-type: none"> – To ensure early detection, prediction and evaluation of possible social changes arising from planning interventions – To determine appropriate measures to mitigate negative impacts and enhance positive impacts before project commencement 	<ul style="list-style-type: none"> – To facilitate smooth and timely implementation of development project the decision of which has been already made
<i>Core values</i>	<ul style="list-style-type: none"> – Respect of individual property rights – Capacity building and community empowerment – Realization of human and social potentials – Social inclusion and respect diversity 	<ul style="list-style-type: none"> – Respect of collective interests over individual interests – Promote social harmony and unity of the community – Realization of bureaucratic interests and party values – Problem solving-oriented and pragmatism-focused
<i>Principles</i>	<ul style="list-style-type: none"> – Equity (including inter-generational and intra-generational) is a fundamental element – Emphasis on local cultural values – Encourage bottom-up participation – Assessment is integrated with project planning, option-selection and decision-making – Provide an opportunity for public debate on controversial issues 	<ul style="list-style-type: none"> – Ensure fair and reasonable compensation in accordance with the law – Emphasis on common welfare and resolution of practical difficulties – Implement top-down decisions – Assessment is integrated with project implementation – Avoid social confrontations and public debate on controversial issues
<i>Process</i>		
<i>Integration with planning process</i>	<ul style="list-style-type: none"> – Usually a separate legal step required at the beginning of planning process to identify the best alternative for project design and implementation 	<ul style="list-style-type: none"> – A part of the EIA and is separated from project planning process; usually adopted as a formality to justify already-made project decisions
<i>Implementation agency</i>	<ul style="list-style-type: none"> – Usually undertaken by independent consulting agents 	<ul style="list-style-type: none"> – Usually by local officials and government-selected experts from research institutes, universities and professional organizations
<i>Public Involvement</i>	<ul style="list-style-type: none"> – Ongoing activity in the assessment process governed by legislation 	<ul style="list-style-type: none"> – One-off, targeted publicity campaign orchestrated by the government bureaucracy
<i>Role of the Public</i>	<ul style="list-style-type: none"> – Full recognition of individual rights – Participation in the capacity of taxpayers 	<ul style="list-style-type: none"> – Limited recognition of individual rights – Participation in the capacity of affected parties
<i>Extent of Public Participation</i>	<ul style="list-style-type: none"> – High level of participation – The public to inform decision making 	<ul style="list-style-type: none"> – Minimal level of participation – The public as the policy recipients

Source: Authors.

expediency, local authorities simply sweep aside the formality of impact assessments in their development projects. Some assessments have been undertaken simply to defend project decisions rather than evaluate project options. This has led to a further weakening of the overall credibility of all independent and rational attempts to assess environmental and social impacts in China.

However, it would be wrong to suggest that the Chinese authorities are not interested in assessing the potential social impacts of their development programmes and projects. With reference to the Guangzhou case study, this paper has shown that the local government had sought to engage the affected community in a completely different manner when compared with Western processes. The diversity is expressed not only in the process of assessing social impacts and involving the public, but also in their ultimate objectives, core values and principles (see Table 5).

While the current deficiency in legal backing has certainly weakened the prospects of SIA and public participation in China, the obstacles lie much deeper in the entire institutional environment of state–society relations, socialist ideology and the traditional culture of the Chinese people. Therefore, it is unlikely that a mere strengthening of the legal framework in favour of SIA implementation and community involvement, as some Chinese scholars have argued (e.g. Hao and Li, 2004; Qian et al., 2004; Luan, 2005; Zhao, 2005), would be able to achieve better progress. An indiscriminate and wholesale transplant of the Western concepts and systems of SIA and participatory planning to China is unlikely to succeed.

Acknowledgements

We are grateful to the Guangzhou Development District administration and Basil van Horen for their

support to our study in Guangzhou. All the views expressed here and the remaining errors belong to the authors. This paper is dedicated to the late Basil van Horen whose enthusiasm for and devotion to international planning work would always be remembered and missed.

References

- Bao CK, Lu YS, Shang JC. Framework and operational procedure for implementing strategic environmental assessment in China. *Environ Impact Assess Rev* 2004;24:27–46.
- Barrow CJ. *Social Impact Assessment*. New York: Oxford University Press; 2000.
- Becker HA. *Social Impact Assessment*. London: UCL Press; 1997.
- Becker HA. *Social Impact Assessment*. *Eur J Oper Res* 2001;128: 311–21.
- Burdge RJ. The benefits of social impact assessment in third world development. *Environ Impact Assess Rev* 1990;10:123–34.
- Burdge RJ. The practice of social impact assessment — background. *Impact Assess Proj Apprais* 2003;21:84–8.
- Burdge RJ, Opryszek P. Interdisciplinary problems in doing impact assessment: the case of Lake Shelbyville. *Technol Forecast Soc Change* 1984;25:29–36.
- Burdge RJ, Roberson RA. *Social impact assessment — the public involvement process*. *Environ Impact Assess Rev* 1990;10:81–90.
- Cai YL, Huo YL. The driving forces of land conversion to non-agricultural land. *China Land* 2002;7:20–2.
- Cao WF. Urbanization is a strategic choice for solving the development problems of rural area. *Theor Explor* 2004;2:54–5 [Text in Chinese].
- Cao ZQ, Long BQ. Discussion on several problems of public participation in environmental assessment in China. *Sichuan Environ* 2004;23:38–40 [Text in Chinese].
- Chen ZJ. Public participation and practice in environmental impact assessment. *Shanghai Environ Sci* 1995;14:8–10 [Text in Chinese].
- Deng M, Xu WB, Li LS. Case of public participation in environmental impact assessment. *Shanghai Environ Sci* 1996;15:7–10 [Text in Chinese].
- Dong XL, Zhao FZ. Methods of public participation in social impact assessment for highway construction projects. *J Highway Transport Res Dev* 1998;15:71–3 [Text in Chinese].
- Editorial Board of China's Environmental Protection. *Environmental Protection in China*. China: Environmental Science Press; 2000.
- Financial Times Information. Text of Chinese premier's speech on land use. *BBC Monitoring International Reports*; 20th December 2004; 2004.
- GDD Administrative Committee. Basic Information about GDD. Guangzhou: Unpublished government document; 2004. (Text in Chinese).
- GDD Statistical Bureau. *Development Report 2002*. Guangzhou: GDD Administrative Committee; 2002 [Text in Chinese].
- Hao RB, Li ZT. An investigation into the legal base for public participation and environmental protection. *Theor Observe* 2004;27:49–51 [Text in Chinese].
- He D, Zhao M. Discussion on the economic-political basis and institutional arrangement for public participation in urban planning. *Urban Plann J* 1999;5:31–4 [Text in Chinese].
- Henry R. Implementing social impact assessment in developing countries: a comparative approach to structural problems. *Environ Impact Assess Rev* 1990;10:91–101.
- Hong Y, Luan SJ. Public participation in Chinese EIAs. *Chongqing Environ Sci* 1999;21:28–30 [Text in Chinese].
- Horberry J. International organisation and EIA in developing countries. *Environ Impact Assess Rev* 1985;5:207–22.
- Ip DF. Difficulties in implementing social impact assessment in China: methodological considerations. *Environ Impact Assess Rev* 1990;10: 113–22.
- Jain RK, Urban LV, Stacey GS, Balbach H. *Environmental Assessment*. Second ed. New York: McGraw-Hill; 2002.
- Jiang J, Zhou PW. Discussion on public participation in urban governance. *Polit Res* 2004;3:101–6 [text in Chinese].
- Jiang P, Shi RX, Luo HQ, Fu XY, Xun YP, Xiong Y. Public participation in the construction of Guiyang Longdongbao Airport. *J Guizhou Normal Univ* 1995;13:78–81 [text in Chinese].
- Li XY. Discussion on the necessity of public participation in public policy making. *J Guangdong Inst Publ Admin* 2004;16:23–35 [Text in Chinese].
- Li XM, Li TW. A comparison between Chinese and Western social impact assessment and public participation. *Environ Sci* 1998;19: 57–60 [Text in Chinese].
- Luan YC. Primary study on countermeasures against embarrassment of environmental enforcement. *J EMCC* 2005;15:30–1 [Text in Chinese].
- Ma XC. Public participation in Chinese environmental protection. *Environ Pollut Prev* 1998;20:21–3 [Text in Chinese].
- Meissner W. Western political science in China. In: Pohl K-H, editor. *Chinese Thought in a Global Context: a Dialogue between Chinese and Western Philosophical Approaches*. Leiden: Brill; 1999. p. 359–71.
- Momtaz S. Institutionalizing social impact assessment in Bangladesh resource management: limitation and opportunities. *Environ Impact Assess Rev* 2005;25:33–45.
- Qian HM, Li YW, Mao WL. Public participation urban planning in China. *J Zhejiang Vocat Tech Inst Transport* 2004;5:65–7 [Text in Chinese].
- Rickson RE, Burdge RJ, Hundloe T, McDonald GT. Institutional constraints to adoption of social impact assessment as a decision making and planning tool. *Environ Impact Assess Rev* 1990a;10: 233–43.
- Rickson RE, Western JS, Burdge RJ. Social impact assessment: knowledge and assessment. *Environ Impact Assess Rev* 1990b;10: 1–10.
- Tan MH, Lu CH. Urban land expansion and farmland loss in China. *J Nat Resour* 2005;20:52–8.
- Tang BS, Wong SW, Liu SC. Property agents, housing markets and housing services in transitional urban China. *Hous Stud* 2006;21: 801–25.
- Tao T, Tan Z, He X. Integrating environment into land-use planning through strategic environmental assessment in China: towards legal frameworks and operational procedures. *Environ Impact Assess Rev* 2007;27:243–65.
- The *People's Daily Online* China to accelerate its urbanization pace. Webpage: http://english.people.com.cn/200212/06/eng20021206_108064.shtml; 6th December 2002.
- Vanclay F. Social impact assessment. In: Tolba M, editor. *Responding to Global Environment Change (Encyclopedia of Global Environmental Change)*. Chicester: Wiley; 2002. p. 387–93.
- Vanclay F. International principles for social impact assessment. *Impact Assess Proj Apprais* 2003a;21:5–11.
- Vanclay F. Conceptual and methodological advances in social impact assessment. In: Becker HA, Vanclay F, editors. *The International Handbook of SIA: Conceptual and Methodological Advances*. Cheltenham: Edward Elgar; 2003b. p. 1–9.

- Vanclay F. Principles for social impact assessment: a critical comparison between the international and US documents. *Environ Impact Assess Rev* 2006;26:3–14.
- Wong SW, Tang BS. Challenges to the sustainability of 'development zones': a case study of Guangzhou Development District, China. *Cities* 2005;22:303–16.
- Wong SW, Tang BS, van Horen B. Strategic urban management in China: a case study of Guangzhou Development District. *Habitat Int* 2006;30:645–67.
- Xu H, Ding Y. Discussion on public participation in social security policy making. *Chin Publ Admin* 2005;235:104–9.
- Zhang HM, Chen F. Public participation in technological decision-making process. *Stud Sci Sci* 2004;22:476–81 [Text in Chinese].
- Zhao J. Defects and improvement of public participation principle in Chinese environment law. *Environ Sci Technol* 2005;28:54–5 [Text in Chinese].