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# Public Participation in Infrastructure and Construction Projects in China: From an EIA-based to a Whole-cycle Process

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PUBLIC PARTICIPATION IN INFRASTRUCTURE AND CONSTRUCTION
PROJECTS IN CHINA: FROM AN EIA-BASED TO A WHOLE-CYCLE PROCESS

# **Abstract**

Many governments world-wide are increasingly encouraging the involvement of interested individuals, groups and organisations in their public infrastructure and construction (PIC) projects as a means of improving the openness, transparency and accountability of the decision-making process and help improve the projects' long-term viability and benefits to the community. In China, however, the current participatory mechanism at the project level exists only as part of the environmental impact assessment (EIA) process. With an increasing demand for PIC projects and social equality in China, this suggests a need to bring the participatory process into line with international practice.

The aim of this paper, therefore, is to identify the weaknesses of EIA-based public participation in China and the means by which it may be improved for the whole life-cycle of PIC schemes. To do this, the results of a series of interviews with a diverse group of experts is reported which analyse the nature and extent of existing problems of public participation in EIA and suggestions for improvement. These indicate that the current level of participation in PIC projects is quite limited, particularly in the crucial earlier stages, primarily due to traditional culture and values, uneven progress in the adoption of participatory mechanisms, the risk of not meeting targets and lack of confidence in public competence. Finally, a process flowchart is proposed to guide construction practitioners and the community in general.

*Keywords:* Public participation, future direction, infrastructure and construction projects, environmental impact assessment, China.

#### Introduction

It is a truism that every decision or action made by a public agency affects citizens to a certain degree. This is particularly the case for public infrastructure and construction (PIC) projects, as the provision of these types of facilities can be controversial and may affect the interests of stakeholders in many parts of society. Therefore, it is very important for these stakeholders that the project initiators (e.g. government) do their best to convey their plans and solicit opinions before any PIC projects commence and right through to the end of the project cycle (Shan & Yai, 2011). A common approach to actively involving relevant stakeholders in the decision process is by public participation (André *et al*, 2006).

Public participation in advanced economies usually involves the collection and analysis of public opinions throughout the project cycle (i.e. the planning, design, construction, operation and demolition of PIC facilities) to help decision-makers establish the most apposite solutions satisfying the broad interests of society (IFC, 1998). However, public participation in developing countries is still in its infancy. In China, for instance, public participation is applied to urban planning only or those schemes entailing an environmental impact assessment (EIA) (Zhang & Jennings, 2009). In view of the macro nature of urban planning initiatives, the EIA-based public participation process is currently the only means available for the public to voice its concerns at the project level (Plummer & Taylor, 2004).

The current participatory process in China is unlikely to be thorough and flexible enough to realise the true spirit of public participation while it is bound by the EIA framework, however. As a result, there are many controversial PIC projects in China, such as the Nu River Dam and the Yuanmingyuan Lake Drainage scheme (Moore & Warren, 2006). Nonetheless, the

experience accumulated from the existing EIA-based public participation process does provide a useful basis for the development of a more transparent, democratic and comprehensive participatory process to cope with the rapid expansion of PIC projects in the country and the increasing expectations of social equality.

This paper, therefore, considers the possibility of introducing a more comprehensive public participation for PIC projects in China by examining the practices and weaknesses of the country's current EIA-based public participatory process. A brief introduction to public participation is presented followed by an account of its emergence in China and the philosophy underlying EIA-based public participation for PIC projects. A series of interviews is then described in which the problems, and suggestions for improvement, of EIA-based public participation are extracted. Finally, a process flowchart of the various stages of a PIC project is proposed as a guide toward a whole-cycle public participation process in the future.

#### Literature review

According to Arnstein (1969:216), public participation is a channel for "the redistribution of power that enables the have-not citizens ... to be deliberately included in the future". Consequently, public participation requires project initiators to acknowledge that "the public has the right to be informed early and to be pro-actively involved in a meaningful way in proposals which may affect their lives and livelihoods" (Enserink & Koppenjan, 2007:463) and more importantly to involve "the individuals and groups that are positively or negatively affected by a proposed intervention" (André et al, 2006:1).

According to Creighton (2005), public participation in principle involves every person, although it may not be possible to reach all the individuals and some may not be interested in being involved. However, it is necessary to ensure that the participants that are involved represent those who are directly, or indirectly, are affected by the proposed project and those who can positively or negatively influence the project outcomes (Lizarralde, 2011). These include the (i) government / project initiators; (ii) lay public who are affected by, or have interest in, the proposed project; (iii) private organisations, such as the design institutes and construction companies; (iv) professional organisations and educational institutions; and (v) pressure groups such as the NGOs and mass media.

By involving the public effectively in the decision making process, the chance of project success may increase due to (i) a reduction in project time and cost (Creighton, 2005); (ii) the development of more innovative plans and solutions through the incorporation of the collective wisdom of the community (CCSG, 2007); (iii) the accomplishment of the needs or concerns of a cross-section of society without sacrificing the project goals (Woltjer, 2009); (iv) an acceptance of the community, which can increase the legitimacy government decisions (Moore & Warren, 2006); (v) an opportunity to promote mutual learning (Manowong & Ogunlana, 2008); (vi) a desire to protect individual and minority rights (Plummer & Taylor, 2004); (vii) an achievement of sustainable project lifecycle management (Varol *et al*, 2011); and (viii) the promotion of collaborative governance (Enserink & Koppenjan, 2007).

Despite its merits, public participation can be challenging to implement when it is newly introduced, as some authorities can have a cynical attitude of the value of participation, and

worry that an overactive citizenry could lead to social disorder and conflict (Shan & Yai, 2011). However, the success of public participation depends not just on the genuine attitude of the project organisers in soliciting public opinion, it also requires the careful planning and organisation of every participatory activity (IFC, 1998). In the absence of appropriate methods and targeting of the right groups of people, the participation process can be administratively costly and meaningless as the decisions made are open to challenges and criticisms (Creighton, 2005).

While public participation may take different forms – not least public hearings, surveys, workshops, advisory committees, etc., participatory activities can be classified according to different levels of participation (Plummer & Taylor, 2004; Rowe & Frewer, 2005). Arnstein (1969), for example, recommended that public participation be divided into eight levels, ranging from the most elementary level of 'non-participation' to 'tokenism' and ultimately 'citizen power'. According to this classification, informing and consulting the public fall within the 'tokenism' level, whereas attaining the 'citizen power' level would require the development of a partnership between the project initiator and the community. Since public participation is still a relatively new concept in China, it usually takes the form of informing members of the public of their rights, responsibilities and options rather than inviting them to voice their opinions (Shan & Yai, 2011). Viewed in this way, it is clear that such a "tokenism" participatory approach does not guarantee that public views will be heeded by those in power (Arnstein, 1969).

# **Emergence of public participation in China**

The well-known 'principle of mass participation', long established by the Chinese government and Chinese Communist Party (CCP), is fundamentally different from public participation in international discourse: the former imposes an obligation on the people to cooperate with and support the government in the implementation of policies, plans or projects, while the latter emphasises the rights of people to be informed, consulted and heard in the decision-making process. According to the Western notion of public participation, the government is not only responsible for informing people about proposed policies, plans or projects and supervising their implementation, but also obligated to ensure public access to information, decision-making and judicial redress (Zhao, 2010). However, such differences may not necessarily lead to an insurmountable gap: theoretically, there is no conflict between the international notion of public participation and China's political regime, in which the country is purportedly for the people and where the government represents the people's wishes (Chen et al, 2007). Chinese law also makes possible the development of the international practice of public participation as, according to the Chinese Constitution 1982, "the people manage state affairs, economic and cultural affairs, and social affairs through various means in accordance with law" (Zhao, 2010).

Public participation in the built environment development in China started in the 1980s with development projects funded by international financial organisations, as it is a fundamental requirement of these organisations to conduct a public participation exercise as part of their EIA (Plummer & Taylor, 2004).

It was in the Circular on Strengthening the Management of EIA for Construction Projects funded by international financial organisations issued in 1993, that public participation was first expressly emphasised in China. Public participation became a formal component of EIA in the Regulation on Environmental Management of Construction Projects that was adopted in 1998, in which developers of construction projects were required to solicit the views of the work units and residents in the vicinity of the proposed projects when preparing the environmental impact report (Zhao, 2010). To further emphasise the importance of public participation, an updated version of the EIA Law was passed in 2002 and became effective in 2003, in which the participation of relevant units, experts and the public in the environmental impact assessment is encouraged. In 2006, the Ministry of Environmental Protection promulgated the Provisional Measures on Public Participation in Environmental Impact Assessment, considered by Chinese scholars and practitioners alike as a marked advance on the 2002 EIA Law, for the regulation stipulates more detailed directions regarding who and how to conduct public participation in the EIA process (Zhang & Jennings, 2009). In the meantime, the promulgation of the Regulation on the Disclosure of Government Information and Measures on the Disclosure of Environmental Information in 2007 ensures further enhancement of participatory rights during the EIA process.

# Current practice

Since the reforming and opening-up policy was implemented in 1978, there has been increased communication and cooperation between China and the international community. The experience with public participation in the EIA processes of construction projects funded

by international bodies made public managers at all levels of the Chinese government become increasingly aware of the value of public input in making decisions that have to balance the needs of the environment and development (Zhao, 2010). Government officials expect that, in addition to having a positive impact on the enforcement of environmental policies, public participation will also help avoid protests on environmental issues (Zhang & Jennings, 2009).

#### Bureaucratic structure

Figure 1 illustrates the current bureaucratic structure of public participation in the EIA process for construction projects in China, brought about as a result of the *Provisional Measures on Public Participation in Environmental Impact Assessment* (MEP, 2006).

# < *Figure 1* >

The department charged with administering environmental protection under the State Council (i.e. Ministry of Environmental Protection of the People's Republic of China) heads the bureaucratic structure and, according to EIA law promulgated in 2002, is responsible for handling the examination and approval of EIA documents for construction projects that (i) are of a special nature, such as nuclear facilities or top-secret projects; (ii) straddle the border between provincial-level regions; or (iii) require examination and approval (of the project) at the national level (NPC, 2002).

The power to examine and approve the EIA documents of any construction projects not being mentioned in the preceding paragraph shall be subject to the prescription of the people's

government of the provinces, autonomous regions and municipalities directly under the Central Government. In case of conflicting conclusions by authorities in two or more affected regions (including sub-regions within provinces), the authority at the next level higher is authorised to handle examination and approval (NPC, 2002).

Construction work units, or their entrusted EIA organisations, are responsible for conducting public participation exercises during the EIA process by such means as public surveys, consulting professional opinions, seminars, discussions and hearings to openly seek public opinion. Members of the public from whom opinion is sought should include concerned units or their representatives (e.g. units, affected residents' committees, labour unions, the Women's Federation, the Disabled Persons' Federation, religious community, NGOs, research institution, etc), experts on environmental, technical, social, economic and public health issues and the lay public of different ages, genders, nationalities and with different educational backgrounds, professions and religious beliefs (MEP, 2006).

## Research methodology

Despite a greater awareness of their rights, few people in China have been exposed to the comparatively highly democratic systems of the Western world. As a result, it would not be meaningful to conduct a questionnaire survey of Chinese people as the results may be biased towards the EIA-based participatory process they are accustomed. In view of the paucity of published data describing the mechanism of public participation in China (and of the need to capture the knowledge and detailed opinions of the stakeholders involved in the participatory process), a semi-structured interview was considered appropriate as it allows the researchers

to interact more thoroughly with the experts to identify ways to improve the mechanism of public participation.

As a result, interviews were conducted with twenty-four experts representing a cross-section of the community, including the government, private sector, professional organisations, pressure groups, NGOs, the general public, and academia. To ensure the usefulness of the interview findings, the interviewees were selected according to the purposive sampling approach. The key criterion for selecting the interviewees was the extent to which they possess adequate knowledge and practical experience of the existing public participation process.

Table 1 summarises the profiles of the interviewees. All the interviewees are at senior management level and have ample hands-on experience in public participation, indicating that their opinions should be sufficiently relevant to the research.

# < *Table 1* >

The interview questions were designed to cover three essential aspects of public participation namely: (i) the experience of EIA-based public participation in China; (ii) the potential for implementing whole project life participatory mechanisms for PIC schemes; and (iii) recommendations for future improvement. In the first section, interviewees were asked to evaluate the current practice of public participation in terms of its scope, participatory level, and related legislation and guidelines. In the second section, interviewees were invited to comment on the stages within the project cycle that most necessitate the participation of the public and the participatory methods to be adopted in those stages. Lastly, the interviewees

were encouraged to recommend possible solutions for resolving the problems associated with the existing public participation process, and on the possible means of increasing the chance of success of comprehensive participation.

## Results

Table 2 summarises the main results of the interviews in terms of bureaucratic structure, capacity of the general public, participation process, legislation and personnel attributed to the various participants involved. These are reorganised below in the more general terms of (i) culture; (ii) current level of participation; (iii) reasons for lack of participation; and (iv) suggested improvements.

< *Table 2a* >

< *Table 2b* >

## Culture

As expected, several of the interviewees pointed out that the traditional Chinese 'principle of mass participation', where the focus is on participating in the implementation of government policies, plans or projects is somewhat different from the Western concept of 'participation', where the focus is on the development of the policies themselves. In such a situation, of course, simply transplanting a Western approach into a country with such a long history of compliance is likely to be naive in the extreme – a point made by an overwhelming majority of the interviewees.

# Current level of participation

In view of these cultural issues, therefore, it is not surprising to hear that participation, in the Western sense, is rather limited in PIC projects in China. For some interviewees, notably from the general public and pressure groups, this was a major complaint – typically, "decision-makers choose not to conduct public participation most of the time". There was concern that the views of the affected general public are hardly incorporated into the final decisions, and they can do nothing but participate in the execution of the plan. A particular issue raised was the lack of participation currently possible in the early stages of project development, when most of the major decisions are made.

# Reasons for lack of participation

Interviewees attributed lack of participation to three major issues: (i) uneven progress in the adoption of participatory mechanisms; (ii) risk of not meeting targets; and (iii) lack of confidence in public competence.

Only one interviewee, from a private sector organisation, was not sure whether public participation could help the proposed project in achieving the anticipated goals, i.e. satisfying the majority of the local public. The major reason given was that they are currently working in the area of urban renewal, where the development of public participation is still very rudimentary.

Some interviewees from government departments, on the other hand, admitted that public participation is sometimes ignored by government officials as there is a view that involving the general public places risks on achieving anticipated quantitative economic targets. While these risks are perhaps an inevitable outcome within a planned economy, they were also seen as directly related to promotion opportunities. Likewise, 20 of the total 24 interviewees believed that conducting public participation activities might lead to cost increase and time delay.

Public competence in contributing to decision-making is viewed from two distinct perspectives. On one hand, some interviewees from government departments and private sector organisations thought suggestions made by the general public to be of questionable value and public participation may not help facilitate the proposed project. This was countered by interviewees from the general public and NGOs, who queried the validity of this position and considered that there should at least be a channel through which their voices could be heard. It was also suggested that current participatory methods for PIC projects in China are too limited and usually only take the form of consulting specialists. From the perspective of general public and pressure groups, this is unreasonable as most of the time the issues raised by the specialists are not something that the affected public really care about. Secondly, several interviewees believed that the perceived lack of value in the general public's comments was not their fault, but rather attributed it to the poor quality of the project information provided to them, as well as the use of unsuitable participatory methods.

# Suggested improvements

In addition to calls for addressing the above, suggested improvements to the current participatory process comprise the need for (i) better timing; (ii) more sophisticated means of input; and (iii) support.

The Provisional Measures on Public Participation in Environmental Impact Assessment expressly stipulates that the earliest timing for the affected general public to participate in the proposed project is before submission of the EIA report for approval. However, most of the interviewees agree that this is too late in the decision-making process to be sufficiently effective. Even the interviewees from government departments partly accept this criticism and admit that participation is restricted at the beginning (i.e. project identification stage) solely to expert involvement. As a result, interviewees almost always advocated the implementation of public participation in the whole cycle of PIC project development and believed that, by integrating this from the very beginning, the proposed project could be initiated and proceed more smoothly and satisfactorily (as evidenced in the cases of the Xiamen PX project) (Zhang & Jennings, 2009).

In elaborating this further, a large majority of the interviewees believed that a process flowchart of public participation throughout the project cycle is needed to guide the construction practitioners responsible for planning or organising public participation activities and improve overall project efficiency. Interviewees from government departments and private sector organisations suggested that such a process flowchart should be comprehensive enough and sufficiently flexible to be applied to different types of projects. It was also suggested that the scope of the general public's involvement should be clearly specified in the flowchart as interviewees from government department and private sector organisations found it quite difficult to define the 'proper' participants involved and to

balance the perceived tension between representativeness of participants and the effectiveness of the whole project.

In addition, interviewees from the general public and pressure groups thought that diversified participatory methods should be applied at the same time and compared with the traditional one-way participatory methods – preferring a two-way information-exchange platform (e.g. public forum) through which to interactively engage with decision-makers.

It was also noted by many that younger Chinese environmental NGOs, established in the mid-1990s, have played a significant role in the environmental public participation movement in China to date. However, according to the comments raised by several interviewees, it was considered that Chinese NGOs should accept more responsibility in: encouraging the lay public to exercise their participatory rights in the decision-making process; organising the public to voice their concerns in an effective manner; providing all environmental stakeholders (e.g. government, private sectors, the lay public, etc.) with technical support and legal guidance; and most importantly, serving as a "watchdog" to supervise the overall participatory process. Interviewees from the general public, professional organisations and pressure groups in particular commented that, with the current bureaucratic structure of public participation in China, it is currently rather vague which party will serve as the "watchdog" to oversee public participation activities and how such participatory exercises should be supervised.

Similarly, closer cooperation with the mass media was also highly recommended by seven interviewees. They argued that, although almost all the Chinese mass media is traditionally controlled by the CCP and the government and operated as their "mouthpiece", it has

changed dramatically with the transition to a more open political system and market economy. This suggests an area of future potential in promoting further public participation in China.

## **Discussion**

A recurring 'problem' highlighted in the survey is that of the traditional Chinese culture of compliance and its associated autocratic mode of governance and decision making. For a country that aspires to the pragmatism of "two systems" of open market and central planning, some shortfall in community participation and influence are to be expected. From a Western viewpoint, with such marked contradictions, it is surprising in many ways that the system works at all!

Severe limitations to public participation in the selection of leaders and development of public policy, and yet the legislated requirement for public participation in PIC projects is clearly confusing in the minds of the populace. At what point in the continuum of decision making does public participation change from being acceptable (and legal) to unacceptable (and illegal)? And how can this position be effectively clarified in a system where even the basis of what is acceptable and unacceptable is unquestionable by the general population? This indeed is a dilemma that has been faced by leaders and guardians across the millennia and a universal normative position has never been agreed. Rather, decisions on participation have largely been informed by the shifting ideologies of leaders and governments, and by the interplay and relations of resistance between decision-makers and civil society.

That the older interviewees made sense of the situation by describing it as a natural state within Chinese cultural tradition is unsurprising, as it does at least offer some rationale behind the present *status quo* and provides answers to what might be tolerated or not tolerated in a new situation. Younger interviewees, on the other hand, appeared likely to be more concerned with just 'getting on' with the current tasks at hand and perhaps less mindful (or fearful) of some of the possible consequences.

Apart from the fundamental incongruities brought about by the combination of its ideology and pragmatism, the necessary inflexibility inherent in China's centrally planned economy would seem to account for many of the issues concerning the timing of the participation process. As some of the interviewees were at pains to point out, the risk to government officials of not achieving planned deadlines (together with a limited public accountability for their actions) is great enough for them to err on the side of curtailing public participation to a minimum.

This phenomenon is not solely a Chinese one however. Most countries recognise that consultation is a time-consuming and expensive business and, with little obvious immediate personal benefit to the decision-makers involved, a chore that most would wish to avoid. The depth of participation often valued in Western approaches to participation has also been generally related to perceived gains for decision-makers, in the sense of greater economic development and political legitimacy. In countries where demands for more wide-spread and earlier participation within the EIA process have been prevalent, and especially where organised civil resistance has been a real possibility for poorly planned projects, the legitimacy of decision-makers' social contracts have often hinged upon broad scale participation within development planning processes. Project sustainability and effective

national budget expenditure have also relied on participation depth to eschew major public backlash against centralised decision-making. While these comparisons cannot yet be applied directly to the Chinese EIA process, such broader scale political and economic movements should also not be ignored when examining the future of public participation in

PIC projects in China.

Figure 2 shows the envisaged comprehensive public participation process for PIC schemes in China. Unlike the existing EIA-based approach, public participation is conducted throughout the project cycle, including the: (i) preparation; (ii) envisioning; (iii) realisation; (iv) planning and feasibility; (v) design and tendering; and (vi) construction stages. This corresponds with the international practice, such as that of the International Association for Public Participation and Community Development Society (Enserink & Koppenjan, 2007), so as to prevent planning, design or even construction being dominated by the ideas of particular project personnel.

Another essential feature is the introduction of project sensitivity in the decision making process – analogous to the practice of the Hong Kong Special Administrative Government (CEDD, 2009). A proposed project is first classified according to one of various sensitivity levels to determine how comprehensive the participatory activities should be during different project stages to ensure appropriate resources and time are allocated for involving the public commensurate with the project's complexity and potential impact on the community.

< Figure 2a >

< Figure 2b >

The experience of the UK's Voluntary and Community Sector and the Government of Canada reaffirms the view that the representativeness of participants and the participatory techniques adopted help determine the successfulness of public participation (CCSG, 2007). Therefore, it is not only crucial to have a balanced composition of participants at various stages of participation, but also essential to ensure the participatory activities meaningfully capture the necessary opinions at different project stages. For instance, representatives from professional institutions and the affected regions should be invited during the preparation and envisioning stages to identify the most critical technical and social concerns – while a cross-section of participants, including the NGO and watchdogs, would help result in a consensus at the planning and feasibility or the design and tendering stages. More importantly, the project initiators need to work together with the community to derive the most suitable methods for public participation – by inviting participants to comment on the participatory activities for example. In this way, it is expected that a fair and transparent participation atmosphere can be created to promote mutual trust (DEC, 2011).

## **Conclusions**

This paper has revealed some of the existing problems of public participation for PIC projects in China and has pointed out some possible future directions for improvement. Though the traditional Chinese perception of "mass participation" is different to the international notion of public participation, there is nothing to suggest that either the Central Government of China or the Chinese people are unwilling to accept Western-style participatory mechanisms. However, as revealed from the interview survey, many problems have occurred in the

development of public participation in China in terms of the bureaucratic structure, public capacity, process management, legislation, personnel, etc.

It is clear that simply replicating the Western participatory mode would not work in Chinese practice due to its unique social, political, cultural and environmental background. However, two major areas identified by the interviewees as priorities for improving current Chinese practice are strengthening the role of NGOs and mass media as "watchdogs", and the introduction of whole-cycle participatory mechanisms. To ensure the participatory process is relevant to the project situation, the project initiators are advised to carefully consider the sensitivity level, participants' scope, supervision parties and participatory techniques. By first classifying a project according to its sensitivity, decision-makers can allocate appropriate time and resources to involve the community and maximise the prospects of success.

Unlike the Western world, current public participation in China is relatively weak and lacks public scrutiny. It is essentially dominated by a shibboleth of experts with little serious attempt to incorporate the views of outsiders. As a result, a governing party such as the National or the Local People's Congress in China normally share the same interests as the decision-makers i.e. the Central Government – a situation counter to the true spirit of public participation. Furthermore, it is likely that a lack of literacy and/or communication skills prevents the participation of those at the 'grass-root' level under the current system. This suggests that more thought is needed in finding ways to enable people from minority groups to take part in the decision process.

The essence of public participation is a process of building consensus among diversified parties including government / project initiators, affected groups, general public / users and

pressure groups / watchdogs. Should there be a gap between the policy makers and wider society, one must try to minimise such differences in order to reach a consensus. As noted, however, even in the West, public participation in decision making rarely occurs naturally at the behest of decision-makers and some form of legislation is invariably needed to procure its existence.

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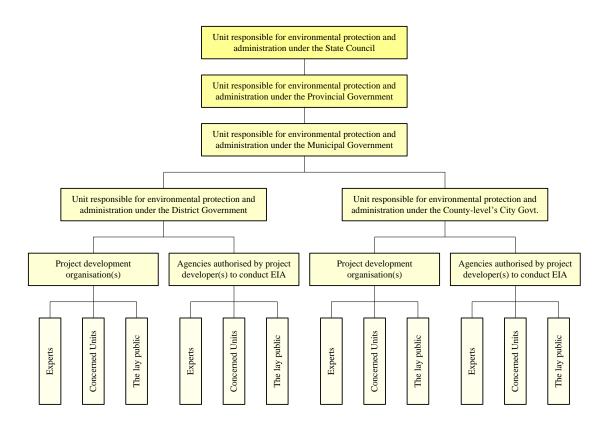


Figure 1: Bureaucratic structure of public participation in EIA for construction projects in China

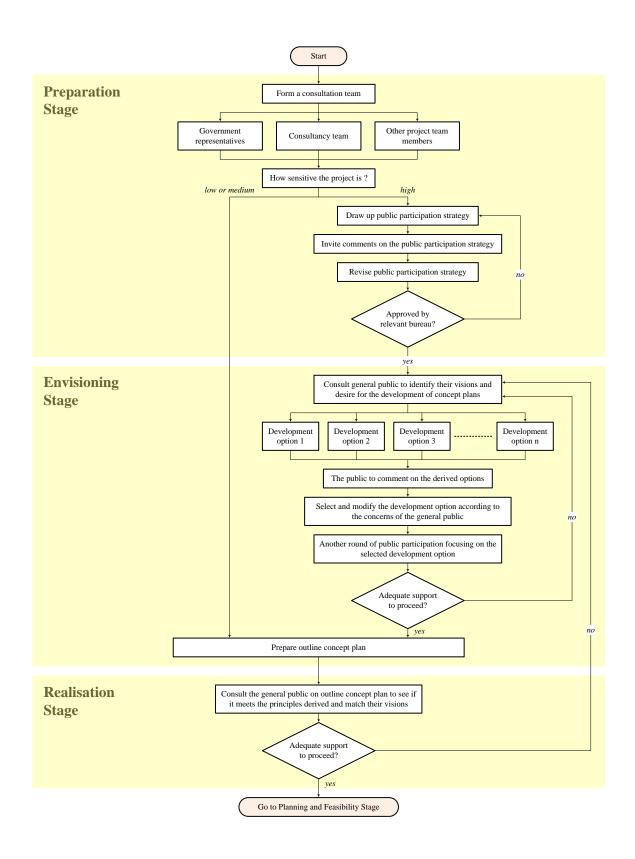


Figure 2a: Proposed process flow of public participation for PIC projects

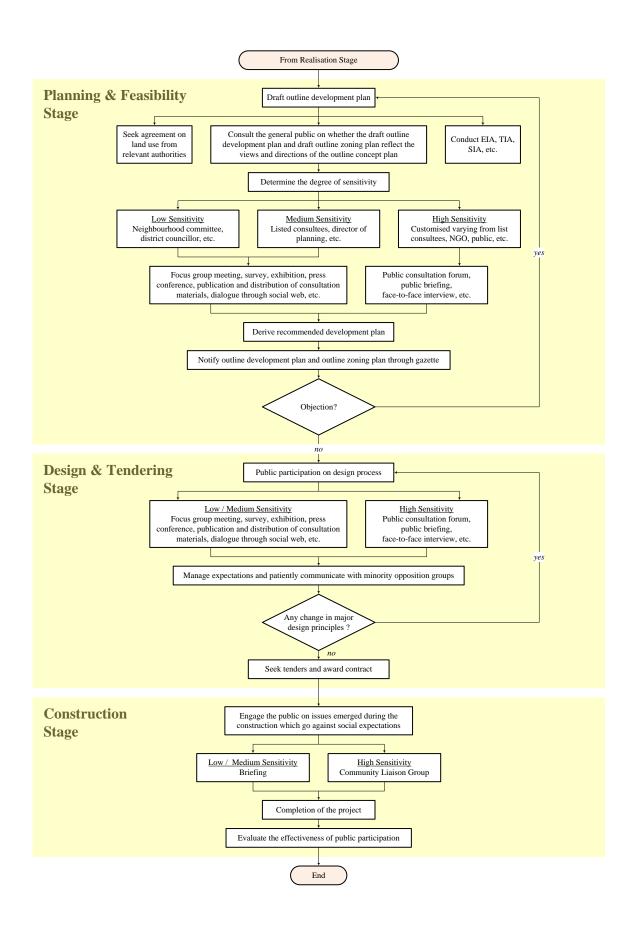


Figure 2b: Proposed process flow of public participation for PIC projects (cont'd)

Table 1: The profile of the interviewees

Group	No.	Position	Organisation
Government	A	Deputy Director	Provincial Bureau
Department	В	Director	Municipal Commission
	С	Deputy Director	Municipal Commission
	D	Deputy Director	Provincial Bureau
	Е	Deputy Director	Municipal Bureau
General	F	The Lay Public	N.A.
Public <sup>a</sup>	G	The Lay Public	N.A.
	Н	The Lay Public	N.A.
	I	The Lay Public	N.A.
	J	The Lay Public	N.A.
Private Sector	K	Project Manager	Real Estate Corporation
	L	Assistant Manager	Engineering Consulting Corporation
	M	General Manager	Construction Company
	N	Assistant Manager	Architectural & Engineering Design Company
	О	General Manager	Construction Company
Professional	P	Associate Professor	Educational Institution
Organisations	Q	Professor	Educational Institution
/ Universities	R	Professor	Educational Institution
	S	Deputy Director	National Research Centre
	Т	Director	Research Centre
Pressure	U	Member	NGO
Groups	V	Director	Environmental Group
(NGOs)	W	Member	Environmental Group
	X	Member	Environmental Group

<sup>&</sup>lt;sup>a</sup> All of the five interviewees (i.e. F, G, H, I and J) from the general public group are currently or have previously been participants of public participation activities.

Table 2a: Existing problems in public participation practice in construction projects in China

Category	Description	Interviewee																			
		$\overline{A}$	В	C	D	E	F (	G E	I	J	K	L	M N	1 O	P	Q I	S	T	U	V	$\overline{V}X$
Bureaucratic Structure	<ul> <li>Most of the government representatives are not used to the participatory approach as the administrative culture is traditionally organised in a strictly hierarchical way and government always act as the leading role in the top-down management framework.</li> </ul>	✓			<b>√</b>		✓ 、	✓ ✓	✓ ✓	<b>✓</b> ✓			✓	<b>√</b>	✓	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b> ,	<del></del>
	<ul> <li>The institutional weaknesses of environmental branch in China at all administrative levels lead to insufficient resources, understaffing and lack of training which bring a negative impact on public participation in EIA for construction projects.</li> </ul>	✓			<b>√</b>	✓							✓	<b>√</b>	√	✓	<b>√</b>	✓		<b>√</b>	<b>→</b>
	<ul> <li>The legal advocates including public and private sector attorneys, NGOs, prosecutors and other governmental advocates, and legal aid centres have not played a significant role in the supervision of the public participation exercise in EIA in China to date.</li> </ul>	✓		✓	<b>√</b>	,	<b>✓</b> ∨	✓ ✓		<b>√</b>	,	,	✓	<b>√</b>	✓	✓	✓	✓	✓	✓ ·	<b>✓</b> ✓
	<ul> <li>The role that the Chinese NGOs are currently playing in the public participation practice is rather minor and limited in bringing public pressure on development projects.</li> </ul>	✓		✓		,	√ v	✓ ✓		✓			✓		✓	<b>√</b>	✓	✓	✓	<b>√</b>	<b>/</b> √
Public Capacity	<ul> <li>Due to the insufficient support of environmental experts and environmental NGOs, the public stills lack environmental consciousness and knowledge and their competence to contribute in any way to EIA is still questioned.</li> </ul>		<b>√</b>		✓ ·	✓					✓	✓	✓	<b>'√</b>		`					
Process	<ul> <li>The general public are only involved in the EIA process of construction projects rather than throughout the whole project cycle.</li> </ul>	✓		✓	√ .	<b>√</b> .	√ v	∕ √	✓ ✓	∕ √	✓	,	✓ ✓	<b>′√</b>	√	<b>√</b>	✓	√	✓	✓ ,	<del>/ √</del>
	<ul> <li>Access to information is restricted though Article 4 of the EIA Law requires EIA reports to be made public and the Provisional Measures on Public Participation in Environmental Impact Assessment require a more systematic and accessible disclosure process (Articles. 8-11).</li> </ul>					,	√ v	✓ ✓	✓ ✓	<b>√</b> √			<b>√</b>		√	<b>√</b>	<b>√</b>		<b>√</b>	√ ·	<del>/                                    </del>
	<ul> <li>The time when releasing project information (before EIA is conducted) is too late as many important decisions have been made and the whole participation therefore becomes <i>ex post facto</i>.</li> </ul>	✓		√	✓ .	√ ·	√ v	∕ √	✓ ✓	✓ ✓	√		✓	✓	√	<b>√</b>	✓	✓	✓	✓ .	7 7
	<ul> <li>The place of participation is not always convenient or easily accessible.</li> </ul>						√ v	/ v	/	√					✓	<b>√</b>			✓	✓	$\overline{}$
	<ul> <li>The representativeness of the participants involved in public participation programmes can hardly be guaranteed.</li> </ul>	√		✓	√	,	√ v	/ √	′ ∨	∕ √	✓		✓ ✓	<b>′</b> √	√	✓	✓	✓	✓	✓	<b>√</b>
	<ul> <li>Only experts are involved in the early stages of decision process.</li> </ul>	$\checkmark$		✓			✓ v	/ _	∕ √	<u>√</u>		✓	✓	<i>√</i>	✓	<b>√</b>	$\checkmark$		$\checkmark$	√ ·	<u>√</u>

Table 2b: Existing problems in public participation practice in construction projects in China (cont'd)

Category	Description	Interviewee																				
	•	A	В	$\overline{C}$	D	E	F (	G H	I	J	K	L	ΜΛ	10	Р	Q	R $S$	5 7	ΓU	UV	$\overline{W}$	$\overline{X}$
Process (cont'd)	<ul> <li>Public participation occurs for too short period which means people do not have enough time to go through all the project-related information and to understand them especially when they are written in overly technical language.</li> </ul>	✓			✓	,	<b>/</b> \	✓ ✓	✓ ✓	✓ ✓		,	✓	✓	✓		`	✓ ✓	✓ ✓	<i>-</i>		<b>√</b>
	<ul> <li>The general public raise their comments mainly through reports, letters and visits and the interactive techniques adopted during the participation process is still insufficient.</li> </ul>	✓		√ <sup></sup>		,	/ v	∕ ∨	✓ ✓	√ √	•	,	√ √	✓ ✓	<b>√</b>	✓	`	∕ ∨	✓ ✓	<i>7</i> √	<b>√</b>	<b>√</b>
	<ul> <li>Timely response to the public is still insufficient which may adversely affect the accountability of the government.</li> </ul>					,	/ v	∕ √	/	✓	,	,	✓ ✓	/	✓	✓	`	/ v	∕ ∨	/ /		<b>√</b>
	<ul> <li>The Western mode of public participation is entirely copied without considering the actual situation of China.</li> </ul>	✓		✓	✓ ,	/ ,	/ v	∕ ∨	✓ ✓	∕ √	,	,	✓ ✓	′ √	✓	✓	√ v	/	~	<b>/</b> √	<b>√</b>	<b>√</b>
Legislation	<ul> <li>Defined standards (e.g. appropriate representativeness of the participants) are still missing which may create loopholes for government officials, developers, and concerned work units.</li> </ul>	✓		✓		,	<b>/</b> \	/ √	✓ ✓	✓ ✓		,	√ √	<i>,</i>		√	١	/ v	∕ √	<i>′</i> √		<b>√</b>
	<ul> <li>The Provisional Measures on Public Participation in Environmental Impact Assessment and the Measures on the Disclosure of Environmental Information provide technical supports rather than the operable articles.</li> </ul>	✓		✓	✓ ,	/ ,	/ v	∕ ∨	/		✓	1	✓	✓	✓	✓	`	/ v	∕ ∨	<i>/</i> √		<b>√</b>
	<ul> <li>A definite regulation of legal obligation about public participation is still missing.</li> </ul>	✓			,	/ ,	/ \	/	<b>v</b>	/		✓ ,	✓		✓	✓	`	/ v	∕ √	/ /		<b>√</b>
	<ul> <li>Legislation on the supervision of the participatory process and on the penalty for improper activities during the participation process is still insufficient.</li> </ul>	✓		√		,	/ \	/ √	✓ ✓	<b>✓</b> ✓		,	✓	√	✓	√	√ v	/ v	∕ •	<i>✓</i> ✓	<b>√</b>	<b>√</b>
Personnel	<ul> <li>Practitioners with sufficient experience in planning and organising participatory exercise are still lacking in government organisations, construction and environmental impact assessment units.</li> </ul>	✓		✓	<b>√</b> ,	/ ,	<i>/</i> \	/ √		<b>√</b>	√ √	,	√ √	′ √	.,	√	١	/ v	∕ √	/		<b>√</b>
	Legal experts in public participation are still insufficient.	$\checkmark$		✓	✓ ,	/	١	/ v	/		$\checkmark$	,	✓ ✓	′ √	$\checkmark$	$\checkmark$	`	/ v	∕ √	/		$\checkmark$
Others	<ul> <li>The traditional Chinese culture of being conservative negatively affects the effectiveness and efficiency of the participatory exercise.</li> </ul>	✓	<b>√</b>	✓	✓ ,	/ ,	/ v	/ √	/	✓	√	1	<b>√</b>	✓	✓	✓	`	∕ ∨	∕ √	/	<b>√</b>	<b>√</b>
	<ul> <li>Overemphasised economic development leads to the neglect of environmental protection and therefore brings an adverse impact to public participation in EIA.</li> </ul>	✓		<u>√</u>	√ ·	7 ,	√ \ ,	/ √	✓ ✓	<u>√</u> √	,	<b>√</b> ,	√	<b>√</b>	<b>√</b>	√	`	∕ ∨	∕ ∨	<u> </u>	<b>√</b>	√