

# Managing the expectations of external stakeholders in construction projects

Albert P.C. Chan and Goodenough D. Oppong  
*Department of Building and Real Estate,  
The Hong Kong Polytechnic University, Hong Kong*

## Abstract

**Purpose** – The consideration of external stakeholders has proven to be more critical than internal stakeholders in construction projects. The purpose of this paper is to present the diverse expectations of external stakeholder groups, i.e. governmental authorities, general public, and affected local communities, in construction projects. The practical steps to manage the expectations are also outlined.

**Design/methodology/approach** – A three-stage methodology was adopted for the review. The primary terms “stakeholder,” “project participants,” or “project environment” were first searched in four popularly search engines and eight top journals that publish construction research to retrieve publications. After a second-stage filtering process, the selected data were then analyzed and reviewed in line with the objectives.

**Findings** – In total, 49 common expectations were identified and classified. The results indicate that each stakeholder group pursues expectations in line with the social, environmental, and economic sustainability objectives. For effective management, project managers (PMs) must know stakeholder opportunities and threats, fulfill social responsibilities, establish common goals, apply appropriate strategies, and enhance stakeholder satisfaction.

**Research limitations/implications** – The identified expectations are only based on the selected publications. Even though the expectations have been categorized in line with the triple bottom line model, the relative importance of the expectations cannot be ascertained since there is no empirical support.

**Practical implications** – PMs can play safe by acknowledging the stakeholder expectations and employ such strategies to curtail resulting impacts and maximize mutual benefits. The list of expectations could also be used to promote equitable value optimization in projects, enhance needs fulfillment, and facilitate the evaluation of external stakeholder satisfaction.

**Originality/value** – This study provides a comprehensive checklist of construction stakeholder expectations which hitherto, is lacked in the literature. Moreover, practical steps to manage the expectations of external stakeholders have been discussed.

**Keywords** Review, Management strategy, Construction projects, Stakeholder management, Expectations, External stakeholders

**Paper type** Literature review

## Introduction

In the contemporary world, the development of construction projects attracts a lot of attention due to the numerous individuals and groups who affect and/or are affected by such projects. Different sets of discrepant and correlated interests arising through projects could pose as threats or opportunities to deliverables (Olander, 2007). The stakeholders are the entities that can affect or be affected by the pursuit of organizations in accomplishing the set goals and objectives (Freeman, 1984). Therefore, the stakeholders connote the representation of the numerous interests arousing through the achievement of firms objectives.

In stakeholder management (SM) research, different models are used for classifying construction stakeholders, however, the classification model based on internal and external

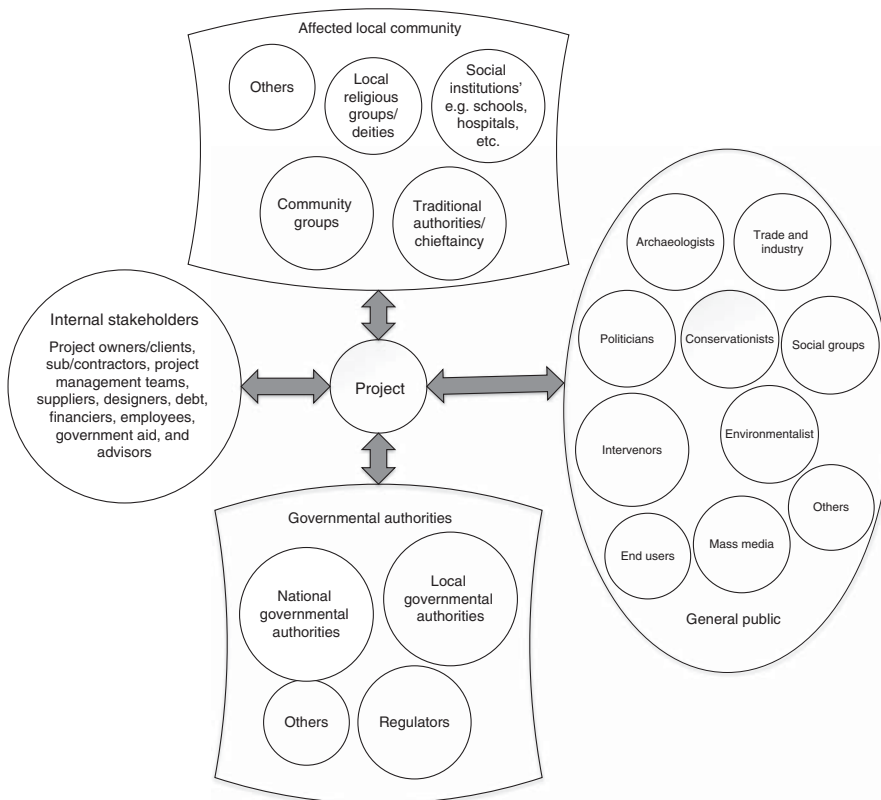
The authors would like to thank the Department of Building and Real Estate of the Hong Kong Polytechnic University for funding this study. It should be noted that the review paper constitutes part of a main PhD study from which other similar research papers differing in objectives/scopes have been produced, thus, sharing common background and methodology. However, the outcomes are distinct and believed to independently contribute to knowledge in this area.



stakeholders is adopted throughout this study (Winch and Bonke, 2002). The internal stakeholders are participants who constitute project coalition or provide finance, and the external stakeholders are those who are significantly affected by projects (Calvert, 1995; Winch and Bonke, 2002). The internal stakeholders, which are mainly contractual project participants, comprise clients, project owners, financiers, project leaders, designers, contractors, subcontractors, and suppliers (Manowong and Ogunlana, 2010; Olander, 2003; Moura and Teixeira, 2010). The external stakeholders also include local and national authorities of government, social organizations, political organizations, local communities, the general public, environmentalists, trade and industry, the media, traditional authorities, and traditional worshipers and deities (Cleland, 1999; Ezeabasili *et al.*, 2015).

The general external stakeholders associated with construction projects are indicated in Figure 1. The external stakeholders in this study are discussed under three major groups: governmental authorities (agencies, commissions, judicial, legislative and executive branches), the general public (represented through consumer, environmental, social, political, and “intervenor” groups), and affected local communities, in line with Cleland (1988).

These stakeholders have different interests and expectations; some in support of projects and others meant to distract progress. They therefore have capacity to influence the success of projects greatly. The stakeholders making use of their power and intentions influence project outcomes in accordance with their interests and expectations (Olander and Landin, 2005;



**Figure 1.**  
Project external  
stakeholders

**Sources:** Cleland (1999), Olander and Atkin (2010), Ezeabasili *et al.* (2015)

Olander and Landin, 2008). Failure to handle and meet stakeholders' expectations throughout project lifecycle has consequently ended up in project failures. Hence, stakeholder participation is encouraged in project delivery to ensure that the different expectations of stakeholders are systematically and formally captured and merged into the project plans and policies (Li *et al.*, 2013). This in the long run enhances the viability of projects and ensures corporate benefit to the external stakeholders (Li *et al.*, 2013). However, the likelihood of projects fulfilling all the expectations of stakeholders is low since the expectations are very diverse and conflicting (Olander, 2007). From the construction industry perspective, stakeholder satisfaction is measured by comparing the pre-project expectations with the actual performance delivered at each project stage (Li *et al.*, 2013). This theory is considered vital, especially how stakeholders try to use their expectations as an opportunity to influence the implementation of construction projects (Olander and Landin, 2008).

In this review, the focus is on the diverse expectations of external stakeholders in the development of construction projects, and the practical steps that should be taken to manage them. The reason being that the consideration of external stakeholders' expectations has been revealed to be comparatively more critical and pressing than internal stakeholder counterparts, especially at the design and planning phase of projects (Olander and Landin, 2008). Also, these expectations of external stakeholders are scattered in literature and therefore, calls for a comprehensive review. The outcome will serve as a guide for project managers (PMs) in decision making during project implementation. The review of the expectations was conducted generically under the context of governmental authorities, the general public, and affected local communities (Cleland, 1988). This grouping is parallel to the responsible, interested, and impacted stakeholders in literature (Zhang and El-Gohary, 2016). The review concludes with practical management steps that should be adopted in handling such expectations in projects.

### **Stakeholder expectations**

The interests of external stakeholders take several forms like demands, expectations, reasons, needs, and values (Lukes, 2005). Zhang and El-Gohary (2016) consider values to also imply needs, interests, beliefs, project goals, requirements, benefits, design principles, and project evaluation criteria. For instance, this relationship was reflected in Olander and Landin (2005) that investigated the question "how interested is each stakeholder group to impress its expectations on the project decisions?" The expectations adopted in this study represent external stakeholders' overall requirements and anticipated performance of construction projects (e.g. Olander and Landin, 2005; Li *et al.*, 2012; Chinyio and Akintoye, 2008). The expectations are expressed in terms of socio-cultural, political, environmental, economic, religious belief, and technical dimensions (Ng *et al.*, 2013; Ezeabasili *et al.*, 2015; Orr and Scott, 2008; Orr and Kennedy, 2008; Tam and Tong, 2011). Differences in the social, political, and educational profiles of external stakeholders contribute to the varying nature of stakeholder interests (Olander and Landin, 2005).

### **Research coverage in construction SM**

After the publication of the ground-breaking book by Freeman (1984) (external) SM research has taken stride in construction discipline. Olander and Landin (2008) revealed the factors that positively or negatively affect external SM process with regards to the implementation of projects. Through two railway case studies in Sweden, they reported these factors to include stakeholder needs analysis, communication of benefits and threats, evaluation of alternative solutions, the project organizations, and also media relations. In an earlier study, Olander and Landin (2005) used the power/interest matrix to analyze external stakeholder influence and found the process to be extremely important for planning and development of projects. Boudet and Ortolano (2010) also showed that the

mobilization of stakeholder oppositional effort is constrained within existing social networks and therefore depends on the appropriation of related social structures.

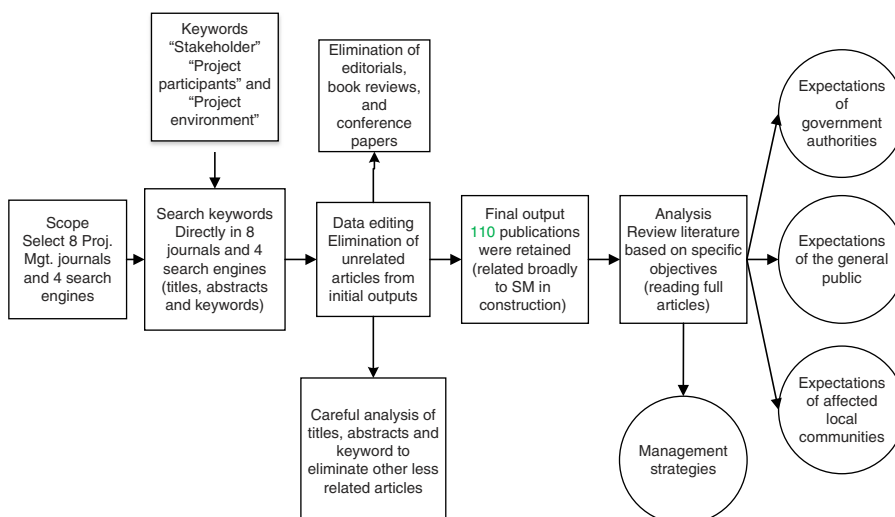
Even though community consultation is essential in project development, the process is considered by many professionals as burdensome, expensive and time exhaustion exercise because the community is regarded a liability far above asset, and also, professionals lack effective skills to consult (Close and Loosemore, 2014). Aaltonen *et al.* (2008) stated that direct and indirect withholding, resource building, coalition building, conflict escalation, credibility building, communication and direct action are the strategies used by affected stakeholders to shape their salience in turbulent and institutional demanding project environment. From the management perspective, adaptation, compromising, avoidance, dismissal, and influence strategies serve as response mechanisms to external stakeholder demands, embedded in institutional structures (Aaltonen and Sivonen, 2009). Even though some PMs actively react toward external stakeholder environment, and thus, continuously engage stakeholders, others are passive and react only during crises in project external environments (Aaltonen, 2011). Research interest is soaring in the area of external stakeholders, who are regarded important in project implementation.

## Research questions

- RQ1.* What are the expectations of external stakeholder groups in construction project implementation?
- RQ2.* What management steps should be taken to handle the expectations of external stakeholder groups in construction project implementation?

## Methodology

The research process is shown in Figure 2. The search was conducted in the databases of eight selected journals (*Construction Management and Economics*, *Journal of Construction Engineering and Management*, *Engineering Construction and Architectural Management*, *Journal of Management in Engineering*, *International Journal of Project Management*,



**Figure 2.**  
Research process

*Automation in Construction*, *Project Management Journal* and *Building Research and Information*) and four search engines (Google Scholar, ABI/INFORM Complete via ProQuest, Scopus, and Web of Science), which is similar to Yang *et al.* (2009). Aside *Project Management Journal* which is not mainstream construction journal but publishes a considerable number of construction research, the rest of the selected journals are ranked high in Chau (1997). Since the selected databases are limited individually, combining them ensured that adequate publications were captured for the review.

The basic keywords used in the databases were “stakeholder,” “project participants,” or “project environment.” The keywords “project participants” and “project environment” were also used because some authors dealt with aspects of stakeholder theory but did not use the term “stakeholder” in their publications (e.g. Leung *et al.*, 2004). The reason is to arrive at a comprehensive list of publications about construction SM, which will lead to the review (Yang *et al.*, 2009). These keywords were directly searched in the journals and Google Scholar. The titles and previews of the results from Google Scholar were briefly reviewed to decide on their inclusion. Also, since the search terms used are generic in nature and could occur in various other fields, the search was restricted to construction and infrastructure projects where applicable. Thus, the search was further limited to “construction projects,” “infrastructure projects,” or “civil engineering projects” in the larger databases that allowed for such flexibility. Specifically, the search in ABI/INFORM Complete via ProQuest, Scopus, and Web of Science was conducted in this manner, and they initially returned 43, 367, and 79 publications, respectively. A time range of 1984-2016 (up to march) was used because Freeman’s (1984) ground-breaking book publication is believed to be a major milestone in the evolution of SM research (Mok *et al.*, 2015).

Upon conducting the rigorous search, some of the initially retrieved results were either duplication, irrelevant, or less relevant for the purpose of study. Hence, a filtering process was further used to select appropriate publications for the review (Olander, 2006; Yang *et al.*, 2011). First, editorials, conference publications, and book reviews were eliminated (Littau *et al.*, 2010). Second, the selection of relevant publications was primarily based on search terms in titles, abstracts, and keywords, and then brief or full document scanning (where applicable) (Yang *et al.*, 2009). The objective of publication selection is the relevance to construction SM knowledge development across the years, especially related to this study. Hence, all the duplicated, less relevant and irrelevant publications were eliminated before the review. After the filtering process, a total of 110 publications comprising journal papers, theses and books (chapters) were selected (Yang *et al.*, 2009). Since the primary search terms adopted in this study are broad in nature, the selected publications cover broad SM topics including stakeholder engagement, stakeholder analysis, and public participation, and the expectations of other stakeholders outside the scope of this study. Hence, the publications were read in detail and sorted in order to address the specific research questions. While some of the expectations were identified from strict empirical findings, others were identified through context analysis of literature. The distribution of the selected publications is indicated in Table I.

### Discussion of results

The expectations of external stakeholders are categorized following an approach adopted by Roufechaei *et al.* (2014). According to them, the environmental dimension consists of renewable energy, efficiency of energy and materials, ecology, indoor environmental quality, and air pollution. The social dimension also comprises quality of life, health and safety, transportation, and accessibility. Finally, the economic dimension encompasses housing affordability, lifecycle cost, expenditure associated with renovation and development, and profitability. In order to avoid duplication, the expectations are put only under the best fit group.

Publication source/type	No. of publications	Expectations of external stakeholders
<i>Construction Management and Economics</i>	26	<b>741</b>
<i>International Journal of Project Management</i>	25	
<i>Journal of Construction Engineering and Management</i>	9	
<i>Project Management Journal</i>	9	
<i>Journal of Management in Engineering</i>	7	
<i>Habitat International</i>	5	
<i>Built Environment Project and Asset Management</i>	2	
<i>Engineering Construction and Architectural Management</i>	2	
<i>Facilities</i>	2	
<i>Proceedings of the Institution of Civil Engineers: Municipal Engineer</i>	2	
<i>Architectural Engineering and Design Management</i>	1	
<i>Asia Pacific Viewpoint</i>	1	
<i>Automation in Construction</i>	1	
<i>Baltic Journal of Management</i>	1	
<i>Building Research and Information</i>	1	
<i>International Journal of Civil Engineering</i>	1	
<i>International Journal of Construction Management</i>	1	
<i>Journal of Civil Engineering and Management</i>	1	
<i>Journal of Facilities Management</i>	1	
<i>Journal of Planning Education and Research</i>	1	
<i>Management decision</i>	1	
<i>Modern Applied Science</i>	1	
<i>Research Policy</i>	1	
<i>Scandinavian Journal of Management</i>	1	
<i>Sustainability</i>	1	
Books (chapters)	3	<b>Table I.</b> Distribution of selected publications
Theses	3	
Total	110	

## Governmental authorities

All technical and legal approvals for built environment development are sought from the government departments. These governmental stakeholders can expedite or delay construction works to a great extent. The expectations of governmental authorities are shown in Table II.

### *Economic dimension*

The government is in charge of public money and also stipulates policies aimed at directing its expenditures for proper development. The government authorities are therefore concerned about the allocation of public resources in a rational way that will generate substantial benefits (Creighton, 1999). The government also expects construction projects to pioneer economic development by attracting a wide range of local business activities within and without the facilities (Palerm, 1999). Such construction projects house supermarkets, banking halls, entertainment centers, etc. which contribute greatly to income generation for local and international investors. The government may also benefit from the increase in taxes and the economic contributions made by the businesses (El-Gohary *et al.*, 2006).

### *Environmental dimension*

The major form of pollution related to land is the improper disposal of general waste and other poisonous chemicals used in the construction process. Construction project developers are therefore expected to put in stringent measures to ensure efficiency in waste management (Creighton, 1999). As a result, the initial planning stages of construction

No.	Expectations	References
<i>Governmental authorities</i>		
Economic dimension		
G1	Economic benefits accruing to government and local citizens	Palerm (1999), Creighton (1999), URA (2001), M-NCPPC (2001), Lu <i>et al.</i> (2002), PD (2003, 2006), Tanaka (2005), El-Gohary <i>et al.</i> (2006), Wang <i>et al.</i> (2007), Tang <i>et al.</i> (2008), CEDD (2008), Amado <i>et al.</i> (2009), Li <i>et al.</i> (2012, 2013, 2016), Ravesteijn <i>et al.</i> (2014), Mostafa and El-Gohary (2015), Zeng <i>et al.</i> (2015), Zhang and El-Gohary (2016)
G2	Rational allocation of public resources	Creighton (1999), Zeng <i>et al.</i> (2015)
G3	Harmonious development of different local economic activities	Palerm (1999), M-NCPPC (2001), Lu <i>et al.</i> (2002), PD (2006), El-Gohary <i>et al.</i> (2006), Wang <i>et al.</i> (2007), Tang <i>et al.</i> (2008), Chan and Lee (2008), CEDD (2008), Tam <i>et al.</i> (2009), Amado <i>et al.</i> (2009), Stenlund (2009), WKCD (2010), Li <i>et al.</i> (2012, 2013, 2016), Yang (2014), Thekdi and Lambert (2014), Mostafa and El-Gohary (2015), Zeng <i>et al.</i> (2015), Almahmoud and Doloi (2015), Zhang and El-Gohary (2016)
Environmental dimension		
G4	Appropriate construction waste management strategies	Hill and Bowen (1997), Creighton (1999), Aaltonen and Sivonen (2009), Teo (2009), Gluch and Räisänen (2009), Zeng <i>et al.</i> (2015), Almahmoud and Doloi (2015), Zhang and El-Gohary (2016)
Social dimension		
G5	Being functional and acceptable in terms of tariff to diversified social groups	Palerm (1999), CEDD (2008), Amado <i>et al.</i> (2009), WKCD (2010), Li <i>et al.</i> (2012, 2013), Yang (2014), Thekdi and Lambert (2014), Mostafa and El-Gohary (2015), Almahmoud and Doloi (2015)
G6	Adaptability of development to the changing needs	Palerm (1999), URA (2001), M-NCPPC (2001), Lu <i>et al.</i> (2002), PD (2003, 2006), Tanaka (2005), Tang <i>et al.</i> (2008), CEDD (2008), Tam <i>et al.</i> (2009), Amado <i>et al.</i> (2009), WKCD (2010), Li <i>et al.</i> (2012, 2013, 2016), Yang <i>et al.</i> (2014)
G7	Harmonization of the proposed project(s) with local natural setting	Palerm (1999), M-NCPPC (2001), Lu <i>et al.</i> (2002), PD (2003), Olander and Landin (2005), Tanaka (2005), PD (2006), Olander (2007), Wang <i>et al.</i> (2007), CEDD (2008), Amado <i>et al.</i> (2009), Li <i>et al.</i> (2012, 2013), Yang (2014), Ezeabasili <i>et al.</i> (2015)
G8	Proper temporary traffic management during construction	Creighton (1999), El-Gohary <i>et al.</i> (2006), Chan and Lee (2008), Yang (2014), Yang <i>et al.</i> (2014), Almahmoud and Doloi (2015), Ezeabasili <i>et al.</i> (2015)
G9	Safety management and urgent accident response	El-Gohary <i>et al.</i> (2006), Olander (2007), Yang (2014), Thekdi and Lambert (2014), Zeng <i>et al.</i> (2015), Zhang and El-Gohary (2016)
G10	Structural safety in terms of resistance against earthquakes, tornadoes and cyclones	Olander and Landin (2005), Gluch and Räisänen (2009), Ravesteijn <i>et al.</i> (2014), Ezeabasili <i>et al.</i> (2015), Zhang and El-Gohary (2016)
G11	Project must showcase the identity of our city and international reputation	Hill and Bowen (1997), M-NCPPC (2001), Lu <i>et al.</i> (2002), Tanaka (2005), El-Gohary <i>et al.</i> (2006), Wang <i>et al.</i> (2007), Tang <i>et al.</i> (2008), Tam <i>et al.</i> (2009), Amado <i>et al.</i> (2009), WKCD (2010), Li <i>et al.</i> (2012, 2013), Almahmoud and Doloi (2015)
G12	Project should abide by regulations and control	Feige <i>et al.</i> (2011), Zeng <i>et al.</i> (2015)

**Table II.**  
Expectations  
of external  
stakeholder groups

(continued)

No.	Expectations	References
G13	Tourism attractiveness of project	Olander and Landin (2005), El-Gohary <i>et al.</i> (2006), Aaltonen and Sivonen (2009), Stenlund (2009)
G14	Adapt national strategic deployment smartly	El-Gohary <i>et al.</i> (2006), Zeng <i>et al.</i> (2015)
<i>The general public</i>		
Economic dimension		
P1	Value-for-money of the proposed project(s)	Palerm (1999), M-NCPPC (2001), Tanaka (2005), Wang <i>et al.</i> (2007), Tam <i>et al.</i> (2009), Amado <i>et al.</i> (2009), WKCD (2010), Li <i>et al.</i> (2012, 2013, 2016)
P2	Availability of local job opportunities	Palerm (1999) Lu <i>et al.</i> (2002), El-Gohary <i>et al.</i> (2006), Wang <i>et al.</i> (2007), Tang <i>et al.</i> (2008), Chan and Lee (2008), CEDD (2008), Amado <i>et al.</i> (2009), Stenlund (2009), Li <i>et al.</i> (2012, 2013, 2016), Yang (2014), Ravesteijn <i>et al.</i> (2014), Mostafa and El-Gohary (2015), Zeng <i>et al.</i> (2015), Almahmoud and Doloi (2015), Zhang and El-Gohary (2016)
Environmental dimension		
P3	Efficiency in terms of energy conservation	Teo (2009), Yang (2014), Mostafa and El-Gohary (2015), Zeng <i>et al.</i> (2015), Zhang and El-Gohary (2016)
P4	Ensuring environmental health and comfort such as air, thermal and moisture comfort	Hill and Bowen (1997), El-Gohary <i>et al.</i> (2006), Teo (2009), Yang (2014), Zeng <i>et al.</i> (2015), Almahmoud and Doloi (2015), Zhang and El-Gohary (2016)
P5	Preservation of natural habitat and enhancement of biodiversity	Creighton (1999), El-Gohary <i>et al.</i> (2006), Teo (2009), Gluch and Räisänen (2009), Feige <i>et al.</i> (2011), Yang (2014), Ravesteijn <i>et al.</i> (2014), Mostafa and El-Gohary (2015), Zeng <i>et al.</i> (2015), Ezeabasili <i>et al.</i> (2015), Zhang and El-Gohary (2016)
P6	Green and sustainable design and construction of project	Palerm (1999), URA (2001), M-NCPPC (2001), Lu <i>et al.</i> (2002), Tanaka (2005), PD (2006), Tang <i>et al.</i> (2008), CEDD (2008), Tam <i>et al.</i> (2009), Amado <i>et al.</i> (2009), WKCD (2010), Li <i>et al.</i> (2012, 2013, 2016), Yang <i>et al.</i> (2014), Mostafa and El-Gohary (2015), Zeng <i>et al.</i> (2015)
P7	Interior hygiene and cleanliness of facilities	Hill and Bowen (1997), Yang (2014), Almahmoud and Doloi (2015)
Social dimension		
P8	Acoustical, daylight and views improvement	WKCD (2010), Almahmoud and Doloi (2015), Zhang and El-Gohary (2016)
P9	Adequate information and direction on circulation and the safe use of facilities	Almahmoud and Doloi (2015)
P10	Ensuring social equity and recognizing differences in the status of stakeholders	Feige <i>et al.</i> (2011), Almahmoud and Doloi (2015)
P11	Access to work and locations of multi-activities	Palerm (1999), M-NCPPC (2001), Lu <i>et al.</i> (2002), PD (2003, 2006), Tanaka (2005), El-Gohary <i>et al.</i> (2006), Tang <i>et al.</i> (2008), Chan and Lee (2008), CEDD (2008), Tam <i>et al.</i> (2009), Amado <i>et al.</i> (2009), WKCD (2010), Li <i>et al.</i> (2012, 2013, 2016), Yang (2014), Yang <i>et al.</i> (2014), Mostafa and El-Gohary (2015), Almahmoud and Doloi (2015)
P12	Promoting community cohesion	Hill and Bowen (1997), El-Gohary <i>et al.</i> (2006), Teo (2009), Yang (2014), Mostafa and El-Gohary (2015), Zeng <i>et al.</i> (2015), Almahmoud and Doloi (2015)
P13	Project delivery being transparent and fulfilling ethical standards	Zeng <i>et al.</i> (2015)
P14	Incorporating accessibility intervention components in facilities	El-Gohary <i>et al.</i> (2006), Zhang and El-Gohary (2016)

(continued)

Table II.



No.	Expectations	References
P15	Security against theft, burglary and vandalism	Chan and Lee (2008), Almahmoud and Doloi (2015), Zhang and El-Gohary (2016)
P16	Promote intergenerational equity	Hill and Bowen (1997), Feige <i>et al.</i> (2011), Zeng <i>et al.</i> (2015)
P17	Access to and democratic sharing of project information	Feige <i>et al.</i> (2011), Zeng <i>et al.</i> (2015)
P18	Effects on vulnerable groups, e.g. the aged, disabled, etc.	El-Gohary <i>et al.</i> (2006)
P19	Availability of amenities, community and welfare facilities and provision of public open space	URA (2001), M-NCPPC (2001), PD (2003, 2006), Tanaka (2005), El-Gohary <i>et al.</i> (2006), Chan and Lee (2008), CEDD (2008), Tam <i>et al.</i> (2009), Amado <i>et al.</i> (2009), Stenlund (2009), WKCD (2010), Li <i>et al.</i> (2012, 2013, 2016), Yang (2014), Yang <i>et al.</i> (2014), Mostafa and El-Gohary (2015), Almahmoud and Doloi (2015)
P20	Quality and level of social services in local communities	Olander (2007), Yang (2014)
<i>Affected local communities</i>		
Economic dimension		
A1	Appropriate compensation for affected properties and relocation plan/strategy	Palerm (1999), URA (2001), Wang <i>et al.</i> (2007), Tang <i>et al.</i> (2008), Amado <i>et al.</i> (2009), Teo (2009), WKCD (2010), Li <i>et al.</i> (2012, 2013, 2016), Yang (2014), Ravesteijn <i>et al.</i> (2014), Zeng <i>et al.</i> (2015), Ezebasili <i>et al.</i> (2015)
A2	Increased use of substitute local resources, e.g. materials and plants	Chan and Lee (2008), Almahmoud and Doloi (2015)
A3	Increase in local real estate and asset value	El-Gohary <i>et al.</i> (2006), Mostafa and El-Gohary (2015), Zhang and El-Gohary (2016),
Environmental dimension		
A4	Conservation and preservation of land, wetland and natural resource	Creighton (1999), El-Gohary <i>et al.</i> (2006), Teo (2009), Mostafa and El-Gohary (2015), Zeng <i>et al.</i> (2015), Zhang and El-Gohary (2016)
A5	Prevention and mitigation measures against air, water, noise and light pollution	Hill and Bowen (1997), Palerm (1999), Creighton (1999), M-NCPPC (2001), Lu <i>et al.</i> (2002), PD (2003, 2006), Tanaka (2005), El-Gohary <i>et al.</i> (2006), Tang <i>et al.</i> (2008), CEDD (2008), Aaltonen and Sivonen (2009), Teo (2009), Gluch and Räisänen (2009), WKCD (2010), Feige <i>et al.</i> (2011), Li <i>et al.</i> (2012, 2013, 2016), Yang (2014), Yang <i>et al.</i> (2014), Ravesteijn <i>et al.</i> (2014), Mostafa and El-Gohary (2015), Zeng <i>et al.</i> (2015), Almahmoud and Doloi (2015), Ezebasili <i>et al.</i> (2015), Zhang and El-Gohary (2016)
A6	Prevention and mitigation against soil pollution, erosion and flooding	Hill and Bowen (1997), Creighton (1999), El-Gohary <i>et al.</i> (2006), Gluch and Räisänen, (2009) Feige <i>et al.</i> (2011), Mostafa and El-Gohary (2015), Zeng <i>et al.</i> (2015), Almahmoud and Doloi (2015), Zhang and El-Gohary (2016)
Social dimension		
A7	Improvement in neighborhood quality	El-Gohary <i>et al.</i> (2006), Olander (2007), Teo (2009), Yang (2014), Thekdi and Lambert (2014), Zhang and El-Gohary (2016)
A8	Involvement of neighbors in design and planning process	Hill and Bowen (1997), El-Gohary <i>et al.</i> (2006), Yang (2014), Zeng <i>et al.</i> (2015), Almahmoud and Doloi (2015)
A9	Project must reflect unique local characters	Hill and Bowen (1997), URA (2001), M-NCPPC (2001), PD (2003, 2006), Tanaka (2005), El-Gohary <i>et al.</i> (2006), Olander (2007), Tang <i>et al.</i> (2008), Tam <i>et al.</i> (2009), Amado <i>et al.</i> (2009), Stenlund (2009), WKCD (2010), Li <i>et al.</i> (2012, 2013, 2016), Mostafa and El-Gohary (2015), Almahmoud and Doloi (2015)

Table II.

(continued)

Table II.

No.	Expectations	References
A10	Technical design in terms of aesthetics, density, height and visual permeability	URA (2001), M-NCPPC (2001), PD (2003, 2006), Tanaka (2005), El-Gohary <i>et al.</i> (2006), CEDD (2008), Tam <i>et al.</i> (2009), Amado <i>et al.</i> (2009), WKCD (2010), Li <i>et al.</i> (2012, 2013, 2016), Yang (2014), Mostafa and El-Gohary (2015)
A11	Ensuring the well-being of stakeholders	El-Gohary <i>et al.</i> (2006), Teo (2009), Feige <i>et al.</i> (2011), Yang (2014), Yang <i>et al.</i> (2014), Thekdi and Lambert (2014), Zeng <i>et al.</i> (2015)
A12	Enhancing indigenous people's spiritual connection with land	Teo (2009), Ezeabasili <i>et al.</i> (2015)
A13	Creation of a safe, convenient, comfortable and legible pedestrian circulation and transport network	Palerm (1999), M-NCPPC (2001), Lu <i>et al.</i> (2002), PD (2003, 2006), Tanaka (2005), El-Gohary <i>et al.</i> (2006), Tang <i>et al.</i> (2008), Chan and Lee (2008), CEDD (2008), Tam <i>et al.</i> (2009), Amado <i>et al.</i> (2009), Teo (2009), WKCD (2010), Li <i>et al.</i> (2012, 2013, 2016), Yang (2014), Thekdi and Lambert (2014), Mostafa and El-Gohary (2015), Almahmoud and Doloi (2015)
A14	Conservation of local cultural and historical heritage	Hill and Bowen (1997), Palerm (1999), URA (2001), PD (2003, 2006), Olander and Landin (2005), El-Gohary <i>et al.</i> (2006) Olander (2007), CEDD (2008), Amado <i>et al.</i> (2009), Teo (2009), WKCD (2010), Stenlund (2009), Gluch and Räisänen, (2009), Li <i>et al.</i> (2012, 2013, 2016), Yang (2014), Mostafa and El-Gohary (2015), Almahmoud and Doloi (2015), Zhang and El-Gohary (2016)

projects require Environmental Impact Assessment that is used by the government representatives to assess how the projects intend to handle wastes and other chemical that are dangerous to human health and biodiversity.

### Social dimension

The government departments are concerned about the adaptability of development to the changing needs of society (Tanaka, 2005). Construction projects should be able to cater for the dynamics in the different expectations expressed over projects' life. A good project aimed at bringing substantial value to the general public ought to be flexible enough to allow for easy adaptation to unforeseeable changing circumstances. For instance, De Neufville *et al.* (2008) suggested suitable structural design of project to accommodate future expansion such as additional floors or extension works to cater for increasing demands. Another critical concern is how to merge new projects into local natural setting of the built environment (Olander and Landin, 2005). The new project should not distort structural layouts in the built environment. The development of construction projects often requires the temporary or permanent redirection of human and vehicular traffic (Creighton, 1999). As such, meetings are held early with all the affected stakeholders to negotiate traffic plans, communicate safety measures, and to address the stakeholder complaints (Rowlinson *et al.*, 2010).

Moreover, the government departments are interested in how well the construction projects showcase the identity of the city and international reputation, thus, they are interested in how to catch global attention through good reputation (Hill and Bowen, 1997; Wang *et al.*, 2007). Other social expectations of governmental authorities include safety management and urgent accident response (El-Gohary *et al.*, 2006), abiding by regulations and control (Feige *et al.*, 2011), tourism attractiveness (Olander and Landin, 2005), and adaptation of national strategic deployment smartly (El-Gohary *et al.*, 2006).

### **General public**

The generic definition of stakeholder given by Freeman (1984, p. 46) to be “any group or individual who can affect or is affected by the achievement of the organization’s objectives” has subsequently implied everyone as a stakeholder of firms. For instance, this definition to a rare extent considers stakeholders to also encompass the environment, blackmailers, terrorists, and thieves, who are within the domains of firms (Freeman, 1984). Hence, the general public in this context encompass all other related people and entities such as interest and pressure groups who are outside the governmental authorities and affected local communities. The expectations of the general public are indicated in Table II.

### *Economic dimension*

Major projects are often funded by public money accumulated through taxation, exploration of natural resources, or loans from other institutions. In some instance, the strings attached to borrowed funds have direct negative effects on the general public. The general public therefore show great concern for the long-term value achievement in construction projects (Palerm, 1999). In effect, sustained marketing campaigns that will make the public understand the long-term benefits are important to ensure project viability and performance (Salman *et al.*, 2007). The economic benefits that projects offer to neighboring communities through employment opportunities are intended to improve the living standards of the people. Construction projects are sometimes executed by labor-intensive approach to ensure that underprivileged communities enjoy financial contribution at substantial levels as the project remains and circulates within local hands (Hill and Bowen, 1997).

### *Environmental dimension*

Construction projects contribute greatly to the destruction of biodiversity and extend to the disturbance of the natural habitats of rare plant and animal species. Public stakeholders do expect the protection of rare flora and fauna in their natural supportive habitations (Creighton, 1999). For instance, in a residential development project of Kalahari Estate in South Africa, environmentalists raised concerns about the impact of the project on biodiversity. An offset agreement ensured that the developers provided extra land for forest conservation, reduced proposed residential units, and also modified the layout of units to lessen the impact on nearby forest (Bester and van der Merwe, 2010). Given the global energy crises especially in developing countries, construction projects are expected to be designed and delivered in the most sustainable manner that will result in long-term energy conservation efficiency (Tam *et al.*, 2009). The end users expect high level of environmental health and comfort while using facilities in terms of air, thermal, and moisture comfort. To a large extent, the end users should be able to individually control their comfort levels in the facilities (El-Gohary *et al.*, 2006). Moreover, the continual requirement of the public users has to do with interior hygiene and cleanliness during the operation of the facilities (Hill and Bowen, 1997).

### *Social dimension*

Construction projects are meant to bring people together and to ensure a high level of cohesion (Yang, 2014). Through interactive engagement activities, the general public have the opportunity to participate in project and contribute ideas that will ensure a better delivery. Feige *et al.* (2011) identified some public social expectations in construction projects to include ensuring that there is social equity and recognizing differences in the status of stakeholders, access to and distribution of project information, and overall well-being of future generation. Corruption scandals cloud construction projects especially during the bidding process and initial stages. The effect of corruption include project quality

problems which has led to deaths from earthquakes, security incidents, public complaints, and also loss of credibility and tainting of government image (Zeng *et al.*, 2015). The public stakeholders are therefore concerned about transparency in project delivery.

Public users, especially visitors and tourists, will be expecting to have access to various amenities, community, and welfare facilities, and also public open spaces that are supposed to deliver high-quality service (Yang, 2014). Other social expectations of public stakeholders in literature include provisions for accessibility and project impact on vulnerable groups (El-Gohary *et al.*, 2006), access to work and location of multi-activities (Lu *et al.*, 2002), and promotion of intergenerational equity (Feige *et al.*, 2011).

### **Affected local community**

Affected local community groups could engage their power to stall progress by using political and non-political actions, but are least liable for their actions. Affected communities continually exert their influences on deliverables even during the operational stages. In effect, the management of stakeholders logically stretches through the entire lifecycle of projects (Chinyio and Olomolaiye, 2010). The expectations of affected local communities are shown in Table II.

### *Economic dimension*

Construction projects are often complex and could cover extensive land areas which necessitates the compulsory acquisition of private lands for public common interest purposes. Also, there is the concern of physical impacts of projects on adjoining properties and lives, e.g. vibrations, floods, and toxic fumes, which requires proper relocation and monetary compensation of affected parties (Ezeabasili *et al.*, 2015; Tang *et al.*, 2008). According to Zeng *et al.* (2015), about 160 million people in China alone have been forced to move due to the development of water infrastructure projects in the last decades. Construction projects create opportunities to enhance less developed communities through necessitating the use of locally produced construction resources such as materials and plants (Chan and Lee, 2008). This enhances the efficient utilization of undervalued substitute local resources.

According to UNCHS (1981), one indicator of the construction industry fulfilling its potential is the rate at which local construction inputs are developed in terms of quality and availability, and the cost and protection of local industry. Developing countries depend on a higher ratio of imported construction inputs despite the wide varieties of equal substitutes produced locally and applied at a very low rate (UNCHS, 1984). As a result, the affected local communities are interested in how construction will rather benefit the local market (Hill and Bowen, 1997). Also, the economic value of real estate and assets in neighboring residences are expected to increase commensurate with the level and value of deliverables (Mostafa and El-Gohary, 2015).

### *Environmental dimension*

Due to the significant impact of construction projects on local communities, stakeholders raise concerns on the potential conservation of lands and wetlands, and also the preservation of natural resources (Chan and Lee, 2008). Construction operations are highly risky events which have long-term impacts despite the short durations they span. Sustainability principles therefore require the inclusion of posterity in present developmental discourses in order to ensure intergenerational equity toward common natural resource usage and also preventing exploitation. In regions such as Hong Kong where land resources are very scarce/limited (Tam and Tong, 2011), stakeholders will be

expecting substantial conservation of land resources for the best sustainable development options (Teo, 2009).

Local communities consistently express their dissatisfaction with air, water, noise, and light pollutions which are responsible for ill-health, and expecting developers to put mitigation measures in place (Yang *et al.*, 2014). Soil pollution, erosion, and flooding problems are also prevalent developmental concerns that potentially result in the relocation of neighboring residents (Hill and Bowen, 1997). The impact of flooding in terms of national and international scales far exceeds any other form of natural disasters (DTLR, 2001). Figures in the UK alone show that about 27 percent of new building structures are sited in flood plains with high hazards, which raises great concern (Crichton, 2005). Changes in climatic conditions are the likely cause of increasing flooding frequencies with escalating cost consequences (DTLR, 2001). It has been suggested that local authorities should put into effect planning guidance to mitigate against irresponsible and vulnerable infrastructure construction in flood hazard zones (Vivian *et al.*, 2005).

#### *Social dimension*

Social expectations that are raised by affected local residents include neighborhood quality improvement (Chan and Lee, 2008); stakeholder engagement in design and planning of project (Zeng *et al.*, 2015); and reflection of unique local characters in projects (El-Gohary *et al.*, 2006). A critical social concern is the relation of projects with local religious beliefs, as deities and worshipers have been found to be responsible for some construction site conflicts (Ezeabasili *et al.*, 2015). Local people are also concerned about the possibility of people migrating to project communities (El-Gohary *et al.*, 2006). This could put more stress on public facilities and amenities such as recreational centers and open space. Stakeholders further expect the project to deliver a safe, convenient, comfortable, and legible pedestrian circulation and transport network (Tang *et al.*, 2008), and ensure their well-being (El-Gohary *et al.*, 2006).

Societies are built on and preserved by history and culture. The local community therefore expects the deliverables to carry fragrances of intrinsic historic and cultural heritages that define their unique characters (Gluch and Räisänen, 2009). Hill and Bowen (1997) stated that deliverables should be focused on eliminating the possibilities of damages to sensitive landscapes with scenic, cultural, historical, and architectural values. Creighton (1999) identified the philosophical expectations of stakeholders to be how construction projects impact the culture, habit, and religion of people. For instance, in the development of a 60-apartment housing project in Sweden, local interest groups expressed their concerns on the preservation of historical and cultural image of project environment. The project will definitely obscure the view of a historic twelfth-century cathedral from the perspective of the neighbors. The city of Lund is about 1,000 years old and therefore there was the need for the preservation of the cultural and historic image (Olander and Landin, 2005).

It is observed that the expectations of the external stakeholder groups correspond with the objectives of sustainable construction (Williams and Dair, 2007). Moreover, external stakeholders are not just concerned about the present impacts and benefits of construction projects, but more also, the most effective and efficient trade-offs with posterity, stressing why external SM ought to be given the due attention in research and industry.

#### **Effectually managing the stakeholder expectations**

Every organization is surrounded by numerous stakeholders who may express their expectations in the affairs of organizational endeavors. The practical management steps that organizations should adopt to handle related stakeholders are delineated below (Carroll and Buchholtz, 2006; Olander and Atkin, 2010; Manowong and Ogunlana, 2010).

*Who/what are our stakeholders?*

Obviously, the broad definition of “stakeholder” given by Freeman (1984) makes almost everyone a project stakeholder at any time. However, firms should be interested in knowing stakeholders that matter in project decision making. Some issues may come to light through collaboration and confrontation between entities such as users, regulators, and the mass media in line with interests that calls for decision making (Maignan *et al.*, 2005). Identification of stakeholders is subject to the evaluation of power, legitimacy, and urgency attributes possessed by the potential stakeholders (Mitchell *et al.*, 1997).

*What stakes do stakeholders hold in the project?*

The stakes that stakeholders have in organizational endeavors are framed by their expectations in line with the salience attributes (power, legitimacy, and urgency). It is important to understand the nature of the main expectations of stakeholders, and also the magnitude of effect stakeholders can have on construction projects, the avenues through which the expectations will be made known, and how far their expectations will be pursued (Moodley *et al.*, 2008). Subsequently, the nature of stakeholder behavior and the effect on project objectives could be possibly predicted. The stakes are usually socio-culturally, politically, environmentally, economically, religiously, and technically defined (Ng *et al.*, 2013; Ezeabasili *et al.*, 2015; Orr and Scott, 2008; Orr and Kennedy, 2008; Tam and Tong, 2011).

*What opportunities and threats do stakeholders present?*

Every good project stakeholder definition must be driven by the need to properly manage opportunities, threats, and risks related to project implementation. The focus however is on minimizing threats and maximizing the opportunities that come with project development with regards to the nature of project process and the final outcome (Olander and Landin, 2008). Through stakeholder analysis, the various stakeholder opportunities and threats are identified and prioritized, and also the extent of attention to be given them is determined (Oyegoke, 2010). Some opportunities that stakeholders present include access to local information, helping and expediting planning process, and social acceptance and support for project. The threats also include wild or unrealistic demands, stakeholder unlimited power to dictate project direction, and social rejection of projects.

*What responsibility does the project firm have toward related stakeholders?*

A project firm fulfilling its corporate social responsibility is greatly demystified under stakeholder theory phenomenon, which is central to corporate social performance concept (Wood and Gray, 1991). Project firms have social responsibilities comprising economic, ethical, legal, philanthropic and environmental responsibilities toward their stakeholders (Carroll and Näsi, 1997; Yang *et al.*, 2009). The normative stakeholder theory explains that “organizations should acknowledge the validity of diverse stakeholder interests and should attempt to respond to them within a mutually supportive framework because it is a moral requirement” (Donaldson and Preston, 1995). The fulfillment of these responsibilities alongside the project implementation induces stakeholder satisfaction.

*How should the firm acknowledge stakeholder expectations?*

Firms acknowledging the expectations of stakeholders forms part of the communicative process required to resolve conflicts in project development. The perceived acceptability level of potential negative impact orientates the stakeholders toward deliverables and determines the magnitude and direction of influence (Olander and Atkin, 2010). The underlying reason for stakeholders accepting or rejecting projects is the perceived benefits, so a good trade-off between benefits and negative impacts, especially at the

early stage, is crucial to avoid excessive conflicts and ensure project success (Olander and Atkin, 2010). The analysis and mapping of stakeholders have the value of determining how the current stakeholder positions undermine adopted strategy, repositioning certain stakeholders to improve strategy, and assisting stakeholders to maintain the present acceptability level, interest, and power to ensure success (Newcombe, 2003).

*How should the firm establish stakeholders' common goal?*

The commitment of stakeholders to the mutually established goals is the only assurance of the achievement of high project performance (Manowong and Ogunlana, 2010). Common goals refer to the mutual interests of stakeholders in line with social, economic, and environmental objectives of project delivery. Such goals are attained through stakeholder participation, negotiation process, and effective two-way communication. Failure to involve stakeholders at the right time leads to frustration in SM that will lessen the chances of successful delivery and stakeholder satisfaction. The contributions that stakeholders make to project development are vital to success, so it behooves the PMs to balance the correlated and discrepant interest of stakeholders harmoniously. In order to achieve mutual goals, none of the project stakeholder's contributions should be neglected, but rather embraced (Manowong and Ogunlana, 2010). An effective way of achieving common stakeholder goal is public participation setting which allows the diverse objectives and alternative solutions to be refined at different stages until a mutual level is reached.

*What strategies or actions should the firm use to engage stakeholders?*

Goodpaster (1991) developed three approaches useful to deal with stakeholders. The strategic approach gives more priority to the shareholders' profit as compared to other stakeholders' interests. The multi-fiduciary approach assumes that firms have a fiduciary responsibility toward all stakeholders, thereby without discrimination, allotting the stakeholders equal stakes with shareholders. The stakeholder synthesis approach assumes an ethical but non-binding responsibility toward the stakeholders. PMs are required to involve, inform, consult, and collaborate with stakeholders based on their power-interest levels (Newcombe, 2003). Carroll and Buchholtz (2006) recommend PMs to also consider the following in decision making:

- dealing with stakeholder directly or indirectly;
- dealing with stakeholders aggressively or defensively;
- in what manner or time should project firms accommodate, negotiate, shape, or withstand stakeholder demands; and
- timing and manner for engaging a combination of the strategies for a singular course.

*How should stakeholder relationships be sustained?*

Effective communication between the PMs and external stakeholders is crucial in maintaining the existing relationships. Through communication, PMs can know and understand the expectations of their stakeholders. The stakeholders will also have access to important information pertaining to the project that is necessary to shape their salience (Chinyio and Akintoye, 2008). The strategy of reaching all stakeholders is centered on ensuring continuous support and commitment of all necessary stakeholders. The means of communication may be formal or informal, and may also come in verbal, written or electronic forms. A two-way communication enables PMs to also retrieve information from stakeholders through opinion polls and interview surveys (Manowong and Ogunlana, 2010).

### *How to increase stakeholders' satisfaction?*

The external stakeholders may feel satisfied if only they have access to substantial project information (Manowong and Ogunlana, 2006). Aside the evaluation of project performance by comparing project outcomes with predefined objectives, evaluating stakeholder satisfaction is also a way of measuring project success (Long *et al.*, 2004). PMs are required to identify and enforce activities that critically influence stakeholder satisfaction with the management process (Leung *et al.*, 2004). PMs should therefore identify the most relevant expectations that optimizes benefits to all stakeholders generally (Manowong and Ogunlana, 2010). Acknowledging stakeholder expectations early in construction project development increases the chance of bringing fulfillment to stakeholders. Employing open and trustworthy means of communication with the mass media and stakeholders generally is crucial to ensure satisfaction with information flow (Olander and Landin, 2005).

### **Limitations**

The outcome of this study is based on only the 110 publications selected through the sampling approach adopted, i.e. the choice of keywords, databases, and also the publication selection approach. Even though the authors categorized the identified expectations in line with the triple bottom line model, the expectations have not been further ranked in any way, and should be considered to be equally important. The list is as such only intended to provide a basis for future empirical studies.

### **Conclusion and implication**

Different sets of discrepant and correlated interests arising through the development of construction projects could pose as threats or opportunities to deliverables. The consideration of external stakeholders especially at the design and planning phase of projects has proven more critical and pressing than even the internal stakeholder counterparts. Failure to handle and meet the external stakeholders' expectations throughout the lifecycle of projects has consequently ended up in project failures, which are attributable to the resources and power of stakeholders to stop projects.

In this study, common expectations have been reviewed in line with three external stakeholder groups, i.e. governmental authorities, the general public, and affected local communities. The external stakeholders have diversified expectations which are reflected in economic, environmental, and social dimensions of sustainability. Moreover, some common practical management steps to handle the stakeholders have been discussed. PMs first have to identify the relevant external stakeholders, sustain the relationships, and then adopt effective strategies to handle the raised expectations. It behooves the PMs to realize and correctly evaluate these diverse expectations of the related external stakeholders, and further determine the extent of exerted influence on projects. This forms the basis for devising appropriate strategy to handle stakeholders in projects.

The comprehensive list serves as a guide to help PMs promote equity and balance amongst the expectations of the stakeholder groups in project implementation, enhance the fulfillment of needs, and facilitate the evaluation of stakeholder satisfaction. In terms of equitable optimization of expectations, the PMs may fall on the categories of expectations under the different external stakeholder groups and strike a balance that will ensure that the ultimate benefit accruing to the stakeholders is maximized while the negative impact is minimized. Thus, the PMs should not only be interested in the project benefits but rather an equitable trade-off with the long-term costs incurred on the external stakeholders. Meanwhile, appropriate analysis of the expectations of external stakeholders could help PMs in determining which needs and requirements are most crucial and should be met. This is because it is often not possible to fulfill all of stakeholders' needs in project delivery. Besides, the pre-project expectations of the external stakeholders could be compared to the



actual performance delivered by the project, which is measureable at different project stages. Based on the outcome of such evaluations, the PMs may reach a decision on whether to improve or maintain management actions toward the external stakeholders. The importance of such regular evaluations will be to monitor and optimize the satisfaction that the stakeholders derive from the project delivery in line with their expectations. In regions of the world where public participation is still not well practiced, the PMs can use the list as a representative database of external stakeholder expectations in designing and implementing projects aimed at optimizing the values of different stakeholders. Altogether, it is expected to help PMs fulfill the ultimate aim of the management process, i.e. to maximize benefits accruing to the stakeholders and minimize the negative impacts. Through further empirical studies, research and industry are expected to embrace the outcome as a guide in the decision-making process in construction SM.

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**Corresponding author**

Goodenough D. Oppong can be contacted at: [goodenough.de.oppoing@connect.polyu.hk](mailto:goodenough.de.oppoing@connect.polyu.hk)