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Conceptualizing stakeholder engagement in the context of sustainability and its assessment

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Stakeholder engagement in construction projects can be conceptualized in different ways. It can be seen from a strategic management perspective aimed at capturing knowledge, increasing ownership of the project by users, reducing conflict, encouraging innovation and facilitating spin-off partnerships. From an ethical perspective, meaningful stakeholder engagement can be seen to enhance inclusive decision making, promote equity, enhance local decision making and build social capital. The benefits from both of these perspectives are vital for sustainability; however, stakeholder engagement can also be seen from the perspective of an opportunity for social learning—a social process where diverse stakeholders share a common forum, learn about each other's values, reflect upon their own values and create a shared vision and shared objectives. Dialogue is also useful in increasing awareness, changing attitudes and affecting behaviours. Existing practices view stakeholder engagement: mostly from a management perspective; sometimes from an ethical perspective; less often as a combination of the two; and rarely have any element of the social learning perspective. There is a need for an approach that combines all the three perspectives if sustainability is to be pursued. A dialogue-oriented approach to integrated sustainability assessment could provide an ideal means to do so.

Keywords: Stakeholder, sustainability, strategic management, ethics, social learning, dialogue, sustainability assessment.

Introduction

There are three distinct approaches for conceptualizing stakeholder engagement in construction projects. These relate to viewing stakeholder engagement as: a management technique; an ethical requirement; or a forum for dialogue to facilitate mutual social learning. The adoption of these different approaches leads to different benefits. There are also different approaches for operationalizing the concept of sustainability and there are parallels between the alternative views on conceptualizing sustainability and the approaches to stakeholder engagement. The ambitious and values-based nature of the concept of sustainability and the potential benefits offered by different approaches to stakeholder engagement develop a compelling case for developing processes that can deliver these benefits. The purpose of this paper is to highlight how the

evolving discourses on stakeholder engagement, sustainability and its assessment are increasingly calling attention to dialogue-based approaches; and emphasize the potential for developing a framework for sustainability assessment which can maximize the potential benefits from these emerging concepts.

The first distinct approach to conceptualizing stakeholders and their engagement is the strategic management perspective. This approach is primarily concerned with identifying which claims or persons, or groups or organizations are important for a company and to whom the management must pay attention. For example, Bryson (2004) has conducted a comprehensive review of stakeholder identification and analysis techniques with a focus on their usefulness for managers in order to improve the performance of their organizations, either directly or indirectly. This approach is largely utilitarian in nature. The second distinct approach is related to considering stakeholders as citizens having a right to determine (or at least influence) the services and valuing the process of

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participation for democratic reasons. This view has been more prominent in case of public policy where the desire for engaging with ordinary citizens is strongly rooted in the dimensions of participatory governance, equity and transparency. For instance, in the context of user and public involvement in health services the democratic approach which emphasizes empowerment has been differentiated from a consumerist approach which is instrumental (Ridley and Jones, 2002; Rowe and Shepherd, 2002). This approach has a strong underlying ethical basis. The third approach views stakeholder engagement as dialogue—a social process which has inherent elements of reflection and mutual learning (Innes and Booher, 2004). This perspective views the process of engagement in terms of the less tangible but valuable benefits associated with dialogue conducted in constructive conditions.

The concept of sustainability has gained wide acceptance in policy and rhetoric. However, similar to the concept of stakeholder engagement, sustainability can also be viewed from different perspectives. Ratner (2004) has examined the underlying structure of the discourse on sustainability from a sociological perspective and developed a typology in which operationalization of sustainability can be viewed as a technical pursuit, or as an ethical shift, or as a 'dialogue of values'. If sustainability is accepted as being a desirable goal, then the means for pursuing it need to be developed. The diversity of perspectives on sustainability poses a challenge to the design of these means. Sustainability is an ambitious goal which requires, among other efforts, new kinds of governance and decision-making processes involving a large variety of stakeholders (Irwin *et al.*, 1994; Loorbach and Rotmans, 2006).

Hence, stakeholder engagement has a significant role to play in the pursuit of sustainability, provided it can be designed in a way so as to deliver the benefits of all the three perspectives on stakeholder engagement, rather than just one or two of them.

Stakeholder engagement as a management technique

The concept of stakeholders has acquired a prominent place in management theory and practice (Bryson, 2004). Mitchel *et al.* (1997) traced the wide acceptance of this concept to the publication of the book, *Strategic Management: A Stakeholder Approach*, by Freeman in 1984. Freeman (1984, p. 46) defined a stakeholder as 'any group or individual who can affect or is affected by the achievement of the organization's objectives'. Mitchel *et al.* (1997) reviewed 27 definitions of

stakeholders and distinguished between those defining stakeholders as 'claimants' and those that view them as 'influencers'. Kaler (2002) proposed a third combinatory definition in order to accommodate the ethical as well as strategic pursuits of a business; however, a strong case has been made in favour of the claimant definition (Kaler, 2002; Bryson, 2004) implying that managers need to pay attention not only to those who have an ability to influence an organization but also to those who have a claim on its services (*ibid.*). The nature of this claim, however, is still open to different interpretations. More recently, Olander (2007, p. 279) reviewed the existing definitions of stakeholders in management literature and has proposed that, in the context of projects, there are essentially two categories of stakeholders—'internal stakeholders, who are those actively involved in project execution; and external stakeholders, who are those affected by the project'. This definition thus includes both the influencers (as the internal stakeholders) and the claimants (as the external stakeholders).

Although there is an explicit moral dimension to the claimant approach to stakeholder management in management literature, this is essentially a utilitarian perspective. This is due to the fact that the rationale for attending to stakeholders, in such approaches, is the 'wellbeing of an organization or the achievement of its objectives' (Brugha and Varvasovszky, 2000, p. 241). For example, one of the arguments in favour of considering stakeholders is that those opposed to the project or the organization may jeopardize its activities where they are not engaged (Cleland, 1999). Hence, the purpose for paying attention to stakeholders is the intention of the managers/project managers to avoid or resolve any conflict or opposition to the project. This is similar to what Owens (2000, p. 1141) has described as a 'rationalist, information-deficit model' for public engagement in the context of environmental policy, where the general public is engaged in order to be informed of the scientific knowledge on the matter. The purpose is to get its support for decisions based on scientific and objective knowledge of experts which has been the case for several public information campaigns in the United Kingdom (*ibid.*).

It has been argued that the construction industry should engage with stakeholders to determine what they need. In response to the failure of public-private partnership infrastructure projects because of stakeholder opposition, El-Gohary *et al.* (2006) have claimed that capturing stakeholder inputs in such projects can be crucial. The desire of the private sector to discover the needs of its users is ultimately aimed at increasing market competitiveness and has been interpreted as being a consumerist approach which is different from a democratic approach (Ridley and

Jones, 2002; Rowe and Shepherd, 2002). It has been argued that different project stakeholders possess different values and consequently judge the value of a project in diverse ways and the purpose of stakeholder engagement in this context is to identify and understand the diverse needs and expectations (Thomson *et al.*, 2003; Olander, 2007). Hence, from this perspective, the engagement with stakeholders is aimed at capturing their inputs into the project development process (Bourne and Walker, 2005).

Stakeholder engagement has been much emphasized in the context of international development projects, where the focus has been on identifying those who are affected by a project and actively involving them in project design and delivery in order to ensure that the project is sensitive and responsive to the local needs and conditions. The *World Bank Participation Sourcebook* (1996) has emphasized that those directly affected by the Bank's projects are among its key stakeholders because they are the ones who will gain or lose from the project and often include the poor and the marginalized.

The desire to engage with stakeholders in project decision-making processes is also linked to enhancing the sense of ownership of a project. Shepherd and Bowler (1997) have examined the characteristics of successful engagement in environmental impact assessment and have claimed that when citizens' values are incorporated in the project decision making, they develop a sense of ownership of the project. Similarly, Shindler and Cheek (1999) have examined the involvement of citizens in adaptive natural resource management and suggested that one of the benefits of effective participation is the public ownership of a project. This is considered important for the long-term success and upkeep of a project and thus incorporating the concern for durability of the project as one of the criteria for its success. This is even more important in the context of sustainable built environments where most of the gains occur during the operational phase and this requires the users to have significant buy-in to the solutions adopted in the design phase.

Social choice on the part of communities and individuals as well as various institutions has been argued as being crucial for achieving progress towards sustainable development (Hardi and Zdan, 1997; Devuyst, 2000).

The ethical perspective on stakeholder engagement

McAdam *et al.* (2005) have carried out an extensive evaluation of performance management in the public

sector in the United Kingdom, and assert that the public sector seeks to address the issue of multiple stakeholders who may have diverse and sometimes even conflicting interests, whereas the focus of the private sector is on discovering the needs of their 'customers'. A distinction between the consumerist and democratic approach has been made by Ridley and Jones (2002), who, in the context of health services claim that public participation enhances democratic governance and promotes representation of diverse interests. It has been argued that whereas the consumerist approach stems from the private sector's desire for competitiveness in the market, the democratic approach values the process of participation for the ethical issues of equity and empowerment of citizens (INVOLVE, 2005). Petts (2001) has evaluated the effectiveness of deliberative participatory processes used by English local authorities in waste strategy development and argued that the contemporary political commitment to public participation is set in the context where the representative democracy is unable to sufficiently represent the diverse needs of citizens and the complexity of challenges facing the society demand that participatory democracy is needed to support representative democracy.

In the context of public policy, it has been proposed that individuals should be engaged in their capacities as consumers, taxpayers or citizens (Audit Commission, 1999). Viewing stakeholders as taxpayers or citizens who have a right to influence projects is based on the principle of democracy and aimed at empowering ordinary citizens, thereby strengthening local decision making. It has been pointed out by Brannan *et al.* (2006) that although active citizenship places considerable value on the process of participation, it also seeks to improve the outcomes and that significant research has suggested that engaging directly with citizens in several key policy areas (such as regeneration and housing, crime, health, education and local governance) leads to a variety of good social outcomes including the creation of social capital.

Innes and Booher (2004) have evaluated the flaws in participation methods in the United States of America along with cases of the use of the emerging model of collaborative participation from around the world and claimed that one of the purposes of public participation is to promote equity and fairness because individuals and groups who are excluded from the decision-making processes are likely not to have their needs and preferences reflected in the outcomes. In fact those excluded from decision-making (including policy-making) processes may disproportionately bear the negative (social, economic or environmental) impacts of projects or policies while not benefiting from the positive

impacts. Consequently, it is necessary that decisions are made by those who are expected to bear the main impacts (Meppem and Gill, 1998; INVOLVE, 2005).

In the context of profit-seeking firms, it has been argued that engagement with a wide range of stakeholders implies a shift away from managers' intention of merely satisfying the shareholders' interests towards assuming a larger responsibility towards society. This belief in corporate responsibility for addressing the wider social and environmental development goals of society implies information sharing and constructive negotiating opportunities between businesses and their stakeholders (Gao and Zhang, 2006).

Engagement with wider stakeholders is also seen by Kaatz *et al.* (2005), who evaluate the role of stakeholder participation in building sustainability assessment and have made a case for broadening this participation, to provide legitimacy to any compromises that may need to be made as a result of involvement of multiple stakeholders, through increasing the transparency regarding equity considerations.

Stakeholder engagement as a dialogue of values—opportunity for social learning

Responding to the dilemmas surrounding participation in literature, Innes and Booher (2004, p. 422) have highlighted that although much debate has been centred around the need for direct participation in representative democracy, its value and the extent to which it is needed, the real need is to frame participation as 'a multi-dimensional model where communication, learning and action are joined together and where the polity, interests and citizenry co-evolve'. Stakeholder engagement processes can themselves be looked upon as an opportunity for the actors to share each other's values where 'trust and knowledge are generated and circulated, to provide a foundation of social and intellectual capital upon which collaboration can build' (Healey, 1997, p. 247). A multidirectional information flow between participants undertaken in an open and unhurried fashion facilitates reflection and deliberation among the stakeholders. During the course of such engagement, stakeholders learn about the different values and interests and hence, such deliberation can be seen as a mutual learning process for all the stakeholders involved (Harashima, 1995). Dialogue where diverse stakeholders are equally informed, and are able to present their own opinions and hear the opinions of others in a democratic forum can lead to: enhanced learning; participants recognizing the views of others as being legitimate; and shared values and needs (Innes and Booher, 2004).

Van Driesche and Lane (2002, p. 150) have developed criteria for evaluating the effectiveness of a collaborative planning process and applied them to a case study in the United States of America. According to them, the inclusion of unconventional knowledge, including local cultural knowledge; a focus on understanding the different values of stakeholders instead of having to manage competing interests; and commitment to a deliberative process is essential if such a collaborative process is to succeed. Similarly, it has been argued that the essential criteria for meaningful engagement include: providing stakeholders with opportunities to speak without any fear; ensuring that all opinions are respected; and enabling stakeholders to influence resulting actions (Senecah, 2004). According to Healey (1996), there are three key requirements for such a collaborative process—design of arenas accessible to all those with a stake in an issue, transferring power to make decisions close to those stakeholders who will be affected by them, and promoting engagement methods which allow diverse points of views to be explored.

Social learning has been defined as 'the process of framing issues, analyzing alternatives, and debating choices in the context of inclusive public deliberation' (Daniels and Walker, 1996, p. 73). According to Friedman (1987, pp. 181–2), social learning is a complex process which involves political strategies, theories of reality and values that drive actions in addition to a purposeful activity. Interestingly, Daniels and Walker (1996) argued that the challenge for social learning is to learn about complex issues in situations with inherent conflicts, and not necessarily to resolve conflict.

Consensus building and deliberative democracy are two of the common concepts for participation which emphasize the importance of social learning. Innes and Booher (1999, p. 412) have emphasized that 'consensus building processes are not only about producing agreements and plans but also about experimentation, learning, change, and building shared meaning' and proposed that they should be evaluated in view of the concept of communicative rationality. The theory of communicative rationality was developed by Habermas (1981, p. 44) who defined communicative action as 'that form of social interaction in which the plans of action of different actors are co-ordinated through an exchange of communicative acts, that is, through a use of language orientated towards reaching understanding'. According to Habermas (1981, 1989), when ideal conditions for discourse are adhered to, emancipatory knowledge can be created. The ideal conditions, according to him, include equal information among the stakeholders, respect for each perspective, equal distribution of power to all participants in the dialogue,

Table 1 The potential outcomes of consensus building process (Innes and Booher, 1999, p. 419)

First order effects	Second order effects	Third order effects
Social capital: trust, relationships	New partnerships	New collaborations
Intellectual capital: mutual understanding, shared problem frames, agreed upon data	Coordination and joint action	More coevolution, less destructive conflict
Political capital: ability to work together for agreed ends	Joint learning extends into the community	Results on the ground: adaptation of cities, regions, resources, services
High quality agreements	Implementation of agreements	New institutions
Innovative strategies	Changes in practices	New norms and heuristics
	Changes in perceptions	New discourses

stakeholders having sincere, honest and accurate arguments with legitimate basis. He thus argued for a constructivist approach to learning where knowledge is created as a result of a learning process which is guided by those involved in it. Such engagement processes can lead to a wide range of outcomes as summarized in Table 1.

The challenge of sustainability

Sustainable development has been defined as ‘an ambitious new project intended to act as the focus of human endeavour in the twenty-first century’ (Meadowcraft, 2000, p. 370). The term ‘sustainable development’ has been increasingly used since the 1980s, both as a policy tool and as a policy goal. It was first brought to the mainstream discussion by the report of the World Commission on Environment and Development (WCED)—*Our Common Future* in 1987 (Brundtland, 1987). Although the term had been coined around 1980 by the IUCN (Carvalho, 2001, p. 62), it entered the mainstream public debate with the publication of this report, also called the Brundtland Report. The report defined sustainable development as: ‘development that meets the needs of the present without compromising the ability of future generations to meet their own needs’ (p. 23). This is the most widely referred to definition of this concept. The key features of the concept are (Meadowcraft, 2000):

- it focuses on promotion of development, or progress;
- it places a priority on the ‘needs’ of the poor and those of the future generations;
- it refers to environmental limits to human activity; and
- it defines sustainable development as a process of improvement rather than any particular activity.

Ratner (2004) has distinguished between three distinct approaches for operationalizing sustainable development as: a technical consensus (technique to measure

development while integrating social, environmental and economic factors); an ethical consensus (a single framework of action); and a dialogue of values. Although they are different from each other, the first two approaches believe in value consensus whereas considering sustainable development as dialogue of values assumes that value consensus will always be incomplete (ibid.). If different value perspectives agree on sustainable development being a desirable goal but the ends of action are disputed, then a technical consensus to specify appropriate means cannot be established and if significant conflicts cannot be resolved on the basis of a system of values held by all, then ethical consensus is also deficient (ibid.). It has been highlighted that in order to be effective and meaningful, any systems developed to assess or communicate sustainability must recognize the overlaps between policy, science and the public’s values and objectives (Shields *et al.*, 2002). However, the lack of objectivity does not prevent the application of the concept of sustainability in real situations (Verheem, 2002). If it is accepted that sustainable development cannot be defined in an objective manner and value judgements exist, then, by implication, the exact interpretation of sustainable development should be determined in the context of each project, its particular characteristics and stakeholders.

Meppem and Gill (1998) have emphasized the advantages of a transdisciplinary perspective, claiming that in order to operationalize sustainable development, there is a need to move towards developing a learning environment which recognizes the subjective priorities of different groups. In such a scenario, the challenge in pursuing sustainable development becomes facilitation of appropriate social processes (ibid.). Such social processes must then provide means for mediating between diverse and often conflicting values (Ratner, 2004). Thus according to Meppem and Bourke (1999), who present a critique of the conventional decision frameworks for sustainability, discursive social processes that promote learning and reflection for participants must be developed. Such a perspective, ‘provides

a rationale for seeing participation of actors in deliberating the ends and means of development not only as instrumental in realizing specific development goals, but as constitutive of the very meaning of sustainable development practice' (Ratner, 2004, p. 64). Institutional mechanisms related to decision making for development then need to change (Ratner, 2004) in order to create opportunities where an enhanced understanding of the various dimensions of sustainability can be created (Meppem, 2000). Moreover, Dijkema *et al.* (2006) have analysed the important trends towards innovation in the context of sustainability and claimed that innovation needed in society for achieving sustainability requires the systems to be set within the context of learning societies. In this context, the participation of wider stakeholders in the processes of knowledge generation would be beneficial (Siebenhuner, 2004). The key challenge then for planning for sustainability, is to facilitate a dialogue which encourages reflection of various claims in a framework where these can be openly debated (Meppem, 2000).

The evolving concept of sustainability assessment

Sustainability assessment is being increasingly promoted as a tool to guide policies, plans and projects in order to ensure that they encourage sustainable development (Pope *et al.*, 2004). However, the concept is still evolving and there are several suggestions on what it should try to achieve and how. Pope *et al.* (2004) have identified three approaches to sustainability assessment: EIA (environmental impact assessment)-driven integrated assessment; objectives-led integrated assessment; and 'assessment for sustainability'. They have argued that the EIA-driven approach tends to focus on minimizing negative impacts and the objectives-led approach assesses the contribution of a proposal to aspirational objectives; however, both of them are insufficient to assess whether the proposal is sustainable or not (*ibid.*). Hence, they propose an 'assessment for sustainability' approach which requires a clear interpretation of sustainability and principles-based assessment criteria (*ibid.*). Gibson (2005) and the Government of Western Australia (2003) have provided examples of such generic criteria for sustainability assessment derived from basic principles of sustainability such as inter- and intra-generational equity instead of the simplistic triple bottom line categories.

It has been strongly emphasized that sustainability assessment should not be a separate process, but closely

integrated with the existing structures and decision-making processes within a project. For Devuyst (2000), this is necessary in order for it to be adopted systematically and recognized as being important. According to Verheem (2002) this is necessary in order to lower the threshold for its use. However, another underlying reason for this emphasis is the awareness that sustainability assessment is not an aim in itself, instead it should be conducted to improve the quality of decisions being made (Devuyst, 2000). This has implications for the output that the assessment process should attempt to produce. It has been argued that integrated sustainability assessment 'does not necessarily need to include a quantitative assessment of effects. In many situations, a sound qualitative discussion on whether an option scores better or worse is sufficient' (Verheem and Draaijers, 2006, p. 2). The meaningfulness of sustainability assessment is then more clearly linked to the impact that it can have on project decisions instead of in production of a comprehensive report or a highly accurate quantitative measurement of impacts—these may be part of it, if and where useful for enabling an informed dialogue between stakeholders. Hence, sustainability assessment should be an instrument to assist in enabling a dialogue between the stakeholders during a project development (Wilkins, 2003). Thus, 'sustainability assessment should be designed to initiate creative and innovative thought processes, which lead to solving current problems of sustainable development' (Devuyst, 2000, p. 77). Ukaga (2001, p. 35) has stressed that 'to promote sustainable development it is essential that as many stakeholders as possible participate actively in assessing the given situation and in determining how to improve it'.

Sustainability assessment is then better understood as 'a cyclical, participatory process of scoping, envisioning, experimenting, and learning through which a shared interpretation of sustainability for a specific context is developed' (Weaver and Rotmans, 2006, p. 12). Such a definition, according to Weaver and Rotmans (2006) is capable of addressing the multi-dimensional complexity that is inherent in sustainability assessment. While acknowledging the challenges for the decision-making process that such an approach to a sustainability assessment process poses, it is also important to highlight another key advantage that such an ambitious approach offers—respect for uncertainties (Gibson, 2006) which cannot be addressed through prescriptive assessment processes.

The purpose of the dialogue in the assessment should not merely be to capture the preferences or opinions of the stakeholders, but it should go beyond that to create a context-specific interpretation of sustainability and more importantly, deliberation. This reflects what has

been defined as a shift in the focus of impact assessment from prediction to exploration (Rotmans, 2006). Deliberation implies a continuous dialogue where stakeholders have the opportunity (and are encouraged) to reflect on and reconsider their views in the light of those of other stakeholders. Indeed this needs to be based on a mutual respect for diverse forms of knowledge and understanding including non-expert opinions. Social and collaborative learning are necessary to achieve such stakeholder engagement in sustainability assessment (Kaatz *et al.*, 2006). Sustainability assessment then also acts as a means for education and empowerment (*ibid.*).

Conclusions

There has been recognition that stakeholder engagement processes, if designed appropriately, can deliver a wide range of outcomes ranging from the 'capture of different forms of knowledge' to 'social learning'. Considering sustainability as a subjective goal which can be interpreted in a particular context through a dialogue with the context-specific stakeholders presents a meaningful and promising way to pursue sustainability. The process of sustainability assessment is evolving from a prescriptive technical exercise aimed at merely producing accurate measurements of the magnitude of impacts into a cyclical process facilitating deliberative dialogue between the various stakeholders and closely linked with the project decision-making process in order to explicitly affect the key decisions in relation to their sustainability implications. Hence the sustainability assessment process, if appropriately designed could be the ideal process through which the benefits of stakeholder engagement within a project can be maximized and the sustainability agenda be pursued.

If stakeholder engagement, as part of sustainability assessment, is to aspire to such immense objectives, it must not be built as an add-on to a largely scientific process. Stakeholder engagement needs to be central to the design of such an assessment process. Instead of stakeholder engagement being seen as merely being a desirable feature of the assessment process, the assessment process should be seen as a vehicle for facilitating stakeholder dialogue. The effectiveness of the assessment then, among other things, depends on the success of the stakeholder dialogue in creating those conditions of dialogue where different opinions are respected, reflection and deliberation take place, power is shared and social learning is facilitated. Further research is needed to develop approaches to sustainability assessment which can address these.

The effectiveness of dialogue that takes place within the assessment process also depends on the relation between the project decision-making process and the assessment process. If the assessment is performed as an independent process outside the main project decision-making process with limited impact, there is not sufficient incentive for stakeholders to contribute the resources, creativity and commitment that such an ambitious process may require. However, if the sustainability assessment process is closely aligned to the project design and planning process informing all those decisions with important sustainability implications explicitly, this can be overcome. Hence, more work is also needed to establish how the sustainability assessment process can be designed to be fully integrated within the project planning and design process in order to provide timely information regarding the sustainability implications of key decisions.

References

- Audit Commission (1999) Listen up: effective community consultation. Management Paper, Audit Commission for Local Authorities and the National Health Service in England and Wales, London.
- Bourne, L. and Walker, D.H.T. (2005) Visualising and mapping stakeholder influence. *Management Decision*, **43**(5), 649–60.
- Brannan, T., John, P. and Stoker, G. (2006) Active citizenship and effective public services and programmes: how can we know what really works? *Urban Studies*, **43**(5/6), 993–1008.
- Brugha, R. and Varvasovszky, Z. (2000) Stakeholder analysis: a review. *Health Policy and Planning*, **15**(3), 239–46.
- Brundtlandt, G.M. (ed.) (1987) *Our Common Future: World Commission on Economic Development*, Oxford University Press, Oxford.
- Bryson, J.M. (2004) What to do when stakeholders matter: stakeholder identification and analysis techniques. *Public Management Review*, **6**(1), 21–53.
- Carvalho, G.O. (2001) Sustainable development: is it achievable within the existing international political economy context? *Sustainable Development*, **9**(2), 61–73.
- Cleland, D.I. (1999) *Project Management: Strategic Design and Implementation*, 3rd edn, McGraw-Hill, Singapore.
- Daniels, S.E. and Walker, G.B. (1996) Collaborative learning: improving public deliberation in ecosystem-based management. *Environmental Impact Assessment Review*, **16**, 71–102.
- Devuyst, D. (2000) Linking impact assessment and sustainable development at the local level: the introduction of sustainability assessment systems. *Sustainable Development*, **8**, 67–78.
- Dijkema, G.P.J., Ferrão, P., Herder, P.M. and Heitor, M. (2006) Trends and opportunities framing innovation for

- sustainability in the learning society. *Technological Forecasting and Social Change*, **73**, 215–27.
- El-Gohary, N.M., Osman, H. and El-Diraby, T.E. (2006) Stakeholder management for public private partnerships. *International Journal of Project Management*, **24**, 595–604.
- Freeman, R.E. (1984) *Strategic Management: A Stakeholder Approach*, Pitman, Boston.
- Friedmann, J. (1987) *Planning in the Public Domain: From Knowledge to Action*, Princeton University Press, Princeton, NJ.
- Gao, S.S. and Zhang, J.J. (2006) Stakeholder engagement, social auditing and corporate sustainability. *Business Process Management Journal*, **12**(6), 722–40.
- Gibson, R.B. (2006) Sustainability assessment: basic components of a practical approach. *Impact Assessment and Project Appraisal*, **24**(3), 170–82.
- Government of Western Australia (2003) *Hope for the Future: The Western Australian State Sustainability Strategy*, Department of Premier and Cabinet, Perth, Western Australia.
- Habermas, J. (1981) *The Theory of Communicative Action: Reason and the Rationalization of Society*, trans. T. McCarthy, Beacon Press, Boston.
- Habermas, J. (1989) *The Theory of Communicative Action. Lifeworld and System: A Critique of Functionalist Reason*, trans. T. McCarthy, Beacon Press, Boston.
- Harashima, S. (1995) Environmental dispute resolution process and information exchange. *Environmental Impact Assessment Review*, **15**, 69–80.
- Hardi, P. and Zdan, T. (1997) *Assessing Sustainable Development: Principles in Practice*, International Institute for Sustainable Development, Winnipeg.
- Healey, P. (1996) Consensus-building across difficult divisions: new approaches to collaborative strategy making. *Planning Practice and Research*, **11**(2), 207–16.
- Healey, P. (1997) *Collaborative Planning: Shaping Places in Fragmented Societies*, Macmillan, Basingstoke.
- Innes, J.E. and Booher, D.E. (1999) Consensus building and complex adaptive systems: a framework for evaluating collaborative planning. *Journal of the American Planning Association*, **65**(4), 412–23.
- Innes, J.E. and Booher, D.E. (2004) Reframing public participation: strategies for the 21st century. *Planning Theory and Practice*, **5**(4), 419–36.
- INVOLVE (2005) *People and Participation: How to Put Citizens at the Heart of Decision-Making*, INVOLVE, London.
- Irwin, A., Georg, S. and Vergragt, P. (1994) The social management of environmental change. *Futures*, **26**(3), 323–34.
- Kaatz, E., Root, D.S., Bowen, P.A. and Hill, R.C. (2005) Broadening project participation through a modified building sustainability assessment. *Building Research & Information*, **33**(5), 441–54.
- Kaatz, E., Root, D.S., Bowen, P.A. and Hill, R.C. (2006) Advancing key outcomes of sustainability building assessment. *Building Research & Information*, **34**(4), 308–20.
- Kaler, J. (2002) Morality and strategy in stakeholder identification. *Journal of Business Ethics*, **39**, 91–9.
- Loorbach, D. and Rotmans, J. (2006) Managing transitions for sustainable development, in Olshoorn, X. and Wieczorek, A.J. (eds) *Understanding Industrial Transformation: Views from Different Disciplines*, Springer, Dordrecht, pp. 187–206.
- McAdam, R., Hazlett, S. and Casey, C. (2005) Performance management in the UK public sector: addressing multiple stakeholder complexity. *International Journal of Public Sector Management*, **18**(3), 256–73.
- Meadowcroft, J. (2000) Sustainable development: a new(ish) idea for a new century? *Political Studies*, **48**, 370–87.
- Meppem, T. and Bourke, S. (1999) Different ways of knowing: a communicative turn toward sustainability. *Ecological Economics*, **30**, 389–404.
- Meppem, T. and Gill, R. (1998) Planning for sustainability as a learning concept. *Ecological Economics*, **26**, 121–37.
- Meppem, T. (2000) The discursive community: evolving institutional structures for planning sustainability. *Ecological Economics*, **34**(1), 47–61.
- Mitchell, R.K., Agle, B.R. and Wood, D.J. (1997) Toward a theory of stakeholder identification and salience: defining the principle of who and what really counts. *Academy of Management Review*, **22**(4), 853–86.
- Olander, S. (2007) Stakeholder impact analysis in construction project management. *Construction Management and Economics*, **25**(3), 277–87.
- Owens, S. (2000) ‘Engaging the public’: information and deliberation in environmental policy. *Environment and Planning A*, **32**(7), 1141–8.
- Petts, J. (2001) Evaluating the effectiveness of deliberative processes: waste management case-studies. *Journal of Environmental Planning and Management*, **44**(2), 207–26.
- Pope, J., Annandale, D. and Morrison-Saunders, A. (2004) Conceptualising sustainability assessment. *Environmental Impact Assessment Review*, **24**, 595–616.
- Ratner, B.D. (2004) ‘Sustainability’ as a dialogue of values: challenges to the sociology of development. *Sociological Inquiry*, **74**(1), 50–69.
- Ridley, J. and Jones, L. (2002) *User and Public Involvement in Health Services: A Literature Review*, Partners in Change, Edinburgh.
- Rotmans, J. (2006) Tools for integrated sustainability assessment: a two-track approach. *The Integrated Assessment Journal*, **6**(4), 35–57.
- Rowe, R. and Shepherd, M. (2002) Public participation in the new NHS: no closer to citizen control. *Social Policy and Administration*, **36**(3), 275–90.
- Senecah, S.L. (2004) The trinity of voice: the role of practical theory in planning and evaluating the effectiveness of environmental participatory processes, in Depoe, S.P., Delicath, J.W. and Aelpi Elsenbeer, M.F. (eds) *Communication and Public Participation in Environmental Decision Making*, State University of New York Press, Albany, NY, pp. 13–33.
- Shepherd, A. and Bowler, C. (1997) Beyond the requirements: improving public participation in EIA. *Journal of Environmental Planning and Management*, **40**(6), 725–38.

- Sheilds, D.J., Solar, S.V. and Martin, W.E. (2002) The role of values and objectives in communicating indicators of sustainability *Ecological Indicators*, **2**, 49–60.
- Shindler, B. and Cheek, K.A. (1999) Integrating citizens in adaptive management: a propositional analysis. *Conservation Ecology*, **3**(1), 9, available at www.consecol.org/vol3/iss1/art9/ (accessed 15 September 2006).
- Siebenhuner, B. (2004) Social learning and sustainability science: which role can stakeholder participation play?, in Biermann, F., Campe, S. and Jacob, K. (eds) *Proceedings of the 2002 Berlin Conference on the Human Dimensions of Global Environmental Change 'Knowledge for the Sustainability Transition. The Challenge for Social Science'*, Global Governance Project, Amsterdam, Berlin, Potsdam and Oldenburg, pp. 76–86.
- Thomson, D.S., Austin, S.A., Devine-Wright, H. and Mills, G.R. (2003) Managing value and quality in design. *Building Research & Information*, **31**(5), 334–45.
- Ukaga, O. (2001) Participatory evaluation of sustainable development. *Greener Management International*, **36**, 27–36.
- Van Driesche, J. and Lane, M. (2002) Conservation through conversation: collaborative planning for reuse of a former military property in Sauk County, Wisconsin, USA. *Planning Theory and Practice*, **3**(2), 133–53.
- Verheem, R.A.A. (2002) Recommendations for sustainability assessment in The Netherlands, in Netherlands Commission for EIA (ed.) *Environmental Impact Assessment in the Netherlands: Views from the Commission for EIA in 2002*, available at www.eia.nl/mer/commissie/img/grboek2002.pdf, pp 9–14 (accessed 15 February 2007).
- Verheem, R. and Draaijers, G. (2006) Experiences on sustainability assessment in the Netherlands., Paper presented at IAIA 06 in Stavanger, available at www.eia.nl/mer/commissie/img/integratedassessmentnl0601.pdf (accessed 8 December 2006).
- Weaver, P.M. and Rotmans, J. (2006) Integrated sustainability assessment: What? Why? How? MATISSE Working Papers, 1, available at www.matisse-project.net/ (accessed 18 April 2007).
- Wilkins, H. (2003) The need for subjectivity in EIA: discourse as a tool for sustainable development. *Environmental Impact Assessment Review*, **23**, 401–14.
- World Bank (1996) Identifying stakeholders,, in *The World Bank Participation Sourcebook*, available at www.worldbank.org/wbi/sourcebook/sb0302t.htm (accessed 14 March 2006).