Leadership and Construction Industry Development in Developing Countries

*George Ofori* and Shamas-ur-Rehman Toor

**Abstract:** Leadership is important in all fields of human endeavour. Features of the construction process and construction projects render leadership even more essential. Construction projects are expensive and technically demanding and the project teams are large and diverse. The process is long and involves a large number of discrete and interrelated tasks. Because constructed products influence long-term socioeconomic development in developing countries, poor performance on projects can have severe implications for the nation and its citizens. Thus, the need for effective leadership in construction is even more acute. It may be argued that "effective leadership" is one of the primary answers to the problems of the construction industry, including (and perhaps, especially) problems in developing countries. To this end, greater attention should be given to leadership development.

The following questions are addressed in this study. What is leadership? How important is it in construction? How relevant is leadership to construction in developing countries? How has research on leadership developed over time? What is the current status of research on leadership in construction? How can the situation be improved, especially for the leadership needs of developing countries? What are the relevant issues for construction leadership in developing countries? After addressing these questions, the subject of leadership is related to construction industry development. An agenda for research on construction leadership in developing countries is presented.

**Keywords:** Leadership, Leadership development, Developing countries, Research agenda

**INTRODUCTION**

Leadership has attracted the attention of researchers in a wide range of fields, including history, sociology, military studies, political science, business and education (Vroom and Jago, 2007). Studies on leadership date back many centuries and a huge volume of literature has been built around this topic. Nevertheless, many gaps in the literature on leadership remain and many of the aspects of leadership have not yet been adequately explained (Conger, 1998; Avolio, 2007). In fact, the literature does not agree on a single definition for leadership (Vroom and Jago, 2007; Bennis, 2007) and the debate over the best strategies for leadership development and execution continues (Hackman and Wageman, 2007). There are many persisting questions. These questions include the following: whether leaders are born or can be made (Avolio, 2005) and whether there is a difference between leadership and management (Toor and Ofori, 2008c).

Interest in leadership research has substantially increased over the past few decades. It has been suggested that the development of leadership research can be divided into the following stages (Toor, 2009): (i) classical approaches, which...
include motivation and trait theories, during the first half of the 20th century, (ii) transactional approaches, which include behavioural and contingency theories, during the 1950s and 1960s, (iii) transformational and charismatic leadership theories during the 1970s and 1980s and (iv) developments within the most recent decades. It should be highlighted that the concepts mentioned were dominant in the various eras and the “stages” do not indicate clean breaks, new concepts do not replace the previous approaches but are concurrent with them. Furthermore, the “stages” do not indicate that the succeeding primary concepts are superior.

Today, the confluence and combination of the post-industrial revolution, the information age and globalisation, as well as the implications of this unique congruence of phenomena, pose new challenges to leaders in all types of organisations. These developments are changing the nature of leadership. The key challenges include the human resource issues, such as leadership in multi-cultural and multi-disciplinary teams. This challenge is especially present for teams comprising knowledge workers who might be involved several different companies or at several different locations while significantly contributing to the success of the endeavour, project or organisation. Another key challenge is the intense competition among all sectors given the recent economic and financial crisis. In the construction industry, corruption is an additional challenge that adversely impacts many levels and several stakeholders (Zinnbauer and Dobson, 2008).

In response to these challenges, Bryman (2004) reviewed the developments in leadership research and suggested that this field had recently generated more optimism and diversity in the methodological approaches employed in the field. These methodological developments include the following: (a) improved measurement and analytical methods, (b) greater use of meta-analyses in systematic reviews, (c) increased interest in new topics, such as transformational leadership and charismatic leadership, (d) more and better cross-cultural studies and (e) greater diversity in the types of leadership and organisational contexts studied.

Some of the key terms in current leadership discourse include the following: “spirituality” (Fry et al., 2005), “aesthetics” (Hansen, Ropo and Saeur, 2007; Ladkin, 2008), “authenticity” (George and Sims, 2007) and “service” (Irving and Longbotham, 2008). Additional key terms include the following: “relations” (Golden and Velga, 2008), “values” and “transcendence” (Sosik, 2005), as well as “shared power” and “distributed authority” (Pearce and Conger, 2003; Pearce, Conger and Locke, 2007). These terms indicate a recent dynamism, fluidity and general “softening” of leadership discourse, as well as a general tendency towards complexity in the constructs.

There has been little leadership research in construction (Odusami, Iyagba and Omiirin, 2003; Keegan and Hartog, 2004; Chan and Chan, 2005) and even fewer leadership studies on the construction industries in developing countries. In the context of these countries and, in particular, in the development process of their construction industries, it is necessary to study the following: the need for leaders, the difference leaders can make in their organisations, industries and societies and how leaders are developed.
OBJECTIVES OF THIS ARTICLE

The objectives of this article are to:

1. Assess the importance of leadership in the construction industry in general and in developing countries in particular
2. Consider the state of leadership research and leadership development in construction, as well as consider its relevance to developing countries, especially with respect to construction industry development
3. Discuss ways and means of developing leaders for the construction industries in developing countries
4. Present a research agenda for leadership development in the construction industries of developing countries and development of the construction industries.

LEADERSHIP

What is Leadership?

What is leadership? As noted above, there is no consensus on a definition. Fiedler (1967: 36) suggested that “leadership behaviour means particular acts in which a leader engages in the course of directing and coordinating the work of his group members”. To Burns (1978: 425), “leadership is the reciprocal process of mobilising by persons with certain motives and values, various economic, political and other resources, in context of competition and conflict, in order to realize goals independently or mutually held by both leaders and followers”. Bennis (1989: 65) defined leadership as “the capacity to create a compelling vision and translate it into action and sustain it”. To Yukl (1989: 253), “leadership involves influencing task objectives and strategies, influencing commitment and compliance in task behaviour to achieve these objectives, influencing group maintenance and identification and influencing the culture of an organisation”.

Other definitions include Bass’ definition (1990), which defined leadership as “the principal dynamic force that motivates and coordinates the organisation in the accomplishment of its objectives”. To Gardner (1990: 1), “leadership is the process of persuasion or example by which an individual (or leadership team) induces a group to pursue objectives held by the leader and his or her followers”. Chemers (1997: 1) believed that “Leadership is a process of social influence in which one person is able to enlist the aid and support of others in the accomplishment of a common task”. Finally, Vroom and Jago (2007: 18) defined leadership as “a process of motivating people to work together collaboratively to accomplish great things”.

Certain terms in these definitions that are worth considering for this article include “directing”, “co-ordinating”, “mobilising”, “motivating”, “persuading” and “vision”. Most of the above definitions consider the task objective to include both a leader and followers (Gardner, 1990) (“a common task”) (Chemers, 1997). Certain ways in which leadership has been conceptualised are discussed below.
Approaches to Leadership

As noted above, there have been many approaches to studying leadership over the years. A brief review of certain early works is presented in this study, including certain works during the era of scientific management in the early 20th century, the “trait” and contingency theories that prevailed in the mid-20th century, the charismatic leadership theory, which emerged in the late 20th century and research from this decade. Many modern leadership theories borrow from classical thoughts on leadership (Goethals et al., 2004). The Republic by Plato the first apparent attempt to shed light on political and leadership theory. In Nichomachean Ethics and Politics, Aristotle discussed politics and leadership. Additional famous writings are by Sun Tzu (The Art of War), Niccolo Machiavelli (The Prince) and Vilfredo Pareto (The Treatise on General Sociology).

Scientific management and trait theory

Early leadership analyses from the 1900s to the 1950s differentiated between the characteristics of the leader and followers. In his first book published in 1911, Frederick Taylor focused on tasks, as well as output and explained that the best way to increase efficiency was to improve workers’ techniques and methods. People were viewed as instruments to be manipulated by their managers and the organisation was viewed as a large, well-planned and structured machine. Elton Mayo and colleagues developed the human relations movement, which stressed concern for relationships and emphasised that the benefit for management to consider human affairs (Mayo, 1933).

The underlying assumption of the trait theory on leadership was that leaders are born with certain characteristics, which they utilise to enhance organisational performance and leader prestige. These characteristics include physical features, personality aspects, aptitudes, capabilities, inherited money and social standing. The trait theories’ aim was to prepare a master list of traits that would eventually result in an ideal leader. In Stogdill’s (1948) research, relevant traits included intelligence, alertness to the others’ needs, comprehension of the task, initiative, persistence in managing problems, self-confidence and a desire to accept responsibility and occupy a dominant and controlling position. However, Stogdill noted certain problems with this master-list approach and argued that no universal traits were required for leadership and these traits varied according to the followers’ characteristics, activities and goals. Zaccaro (2007) recently championed the trait approach to leadership and added more depth to the literature on traits. They assert that traits are significant precursors to effective leadership and that combinations of traits and attributes are more likely leadership predictors than independent contributions from multiple traits. In the modern trait theory, certain distal (personality, cognitive abilities, motives, values) and proximal (social appraisal skills, problem solving skills and expertise or tacit knowledge) attributes are thought to converge and promote leader emergence and effectiveness (see Zaccaro, Kemp and Bader, 2004).
Contingency, charisma and authenticity

Contingency theories were championed by those who began thinking about leadership in the situation that it is exercised. Fielder (1967) was first to integrate leader, follower and situational characteristics. His model predicts that more relationship-oriented leaders are more effective with medium situational control and more task-oriented leaders are more effective in high- and low-control situations. If the leader's orientation matches the situation, the leader is predicted to perform more effectively and vice versa. Other contributors to the contingency theory include Vroom and Jago (2007). Interest in the contingency or situational approach remains, although the broader term “context” is now used (Avolio, 2007). Certain criticisms of this theory relate to its perceived conceptual weaknesses and controversy over its methodology.

“Charisma” is a Greek word meaning “divinely inspired gift”. According to Weber (1968), charisma is an individual personality quality that sets the person apart from ordinary humans and the person is treated as endowed with supernatural, superhuman, or, at least, exceptional powers or qualities. House (1977) posited that charismatic leaders have a strong effect on followers' emotions and self-esteem, which are affective motivational variables and not cognitive variables. Once followers are convinced of the leader's ideology, they follow the leader willingly, become fully involved in the task, fully obey the leaders' commands, feel an emotional attraction towards the leader, consider the leader's goals their own and believe that they are a part of a mission that must be accomplished under the leader's guidance. The limitation in House's initial theory was its ambiguity regarding the influence process. House, Spangler and Woycke (1991) presented a more complete concept, which defined charismatic leadership in the following terms: effects on followers, leader personality and behaviour and follower and observer attributions of charisma to leaders. In the first element, charismatic leadership is described as an interactive process between followers and their leader. This process results in the attraction of followers to the leader and the followers' strong internalisation of the leader's values and goals. Over time, the followers develop unquestioning acceptance and obedience of, trust in and commitment to the leader. The next constituent involves leader traits and behaviours that promote charismatic leadership, which include self-confidence, a need to influence, dominance and a conviction that the leader's beliefs are morally right.

Researchers have realised that leadership is not merely a style, charisma, motivation, inspiration, or strategy. In a new construct, “authentic leaders” are thought to possess the highest level of integrity, a deep sense of purpose, courage, genuine passion and leadership skills (George, 2003; George et al., 2007). They nurture their followers as authentic followers. Extracted from positive psychology, ethical leadership and positive organisational behaviour, the authentic leadership construct stresses character authenticity, self-awareness, self-regulation, faithfulness to individuality, genuine beliefs, truth of convictions, idea practicality, veracity of vision, sincere actions and openness to feedback (George and Sims, 2007; Walumbwa et al., 2008). These characteristics may portray certain features from other leadership constructs, such as transformational, charismatic, servant, spiritual and ethical leadership, but authentic leadership proponents contend that it is distinct from other forms of leadership (Avolio and Gardner,
2005). These characteristics suggest that authentic leadership is necessary for organisations today, given the challenges they face.

Leadership and Construction

From the above definitions, leadership is a key factor for success in any activity that involves collaboration among a group (or groups) of people. In construction, leadership is even more essential, this has been established in many studies (see, Odusami, 2002; Long, Ogunlana and Lan, 2004). For example, Thamhain (2003) highlighted the leader's importance in creating a supportive work environment for the project participants. Munns and Bjeirmi (1996) emphasise that the success or failure of project management is highly dependent on the project leader. Chinyio and Vogwell (2007) found that effective leadership of the many stakeholders in a construction project can aid in harmonising their goals and preventing conflict. Despite this recognition that leadership is important at all levels of the construction industry, emphasis is placed on the technical aspects, as well as management and leadership receives inadequate attention (Skipper and Bell, 2006a).

Songer, Chinowsky and Butler, (2006) highlight certain present and future leadership challenges to the construction industry and organisations. Toor and Ofori (2008a) catalogue current and emerging leadership challenges, including challenges that are industry specific, general to businesses and in the operating environment. For example, certain surveys show that respondents in the construction industry had low satisfaction with their leaders' ethics and authenticity (Toor and Ofori, 2007).

Many studies on industrialised nations (Arditi, Koksal and Kale, 2000) and developing countries (Jannadi, 1997; Enshassi, Hallaq and Mohamed, 2006) show that both business and project failures are common in construction. Several reasons are cited for these failures. Bjeirmi, Begg and Scott (2007) noted that the UK construction industry has been the subject of ongoing criticism for its fragmentation and poor record on quality, waste, financial claims, safety and efficiency. They note that a major cause for this criticism is inadequate communication throughout the construction process because inappropriate procurement approaches have been adopted. Toor and Ogunlana (2008a) observed that the major problems that construction projects in Thailand typically face include an inadequate procurement system, inadequate resources, discrepancies between design and construction, inadequate project management practices, order variations, communication lapses, cultural issues and differences in the participant interests. In Malaysia, Abdul-Rahman et al. (2007) found that the quality of management was unsatisfactory for contractors that undertake public design-and-build projects. The quality-related factors that contributed to this situation were budget constraints, time constraints, client complexity, poor communication and design variations. Davidson and Maguire (2003) found that the top ten reasons for failed construction firms in the US included the following: rapid growth, work in new geographic regions, an increase in the sizes of single jobs, new types of work, high employee turnover, inadequate capitalisation, poor estimations, poor accounting systems and poor cash flow. Pires, Teixera and Moura (2007) highlighted the following common problems on construction projects in Portugal: frequent delays, cost overruns, insufficient quality and inadequate safety. These problems have reduced the industry's
competitiveness. Their survey revealed the following reasons for such problems: design and client responsibilities, inadequate construction management and inadequate specific training.

As shown in the above studies, much of the blame for the industry’s poor performance in most countries is often allocated to factors outside of the control of construction organisations and professionals. Certain authors blame economic cycles and the political environment (Enshassi, Hallaq and Mohamed, 2006). Even where the features and failings of the industry, as well as its practices and procedures, are highlighted, practitioners and certain researchers do not appreciate the importance of leadership in the construction industry.

The Features of Construction and Leadership Implications

The construction industry has a greater need for leadership than, arguably, any other field of endeavour. Many reasons support this contention and are evident in the nature of the construction projects, industry and constructed products (Hillebrandt, 2000). First, construction projects are large and technically complex and they involve a combination of specialised skills. Thus, the teams are not only large but are also multi-disciplinary and the members are from several different organisations. Today’s large projects are also multi-cultural. Second, the projects are typically expensive and the stock of buildings represents a large proportion of a nation’s savings. Thus, the quality of the built product is of the essence. Third, the projects take a long time to complete and involve a large number of discrete activities, which increases the certain time-related risks and exacerbate problems with communication, co-ordination and the ability to manage a wide range of risks. Finally, the projects and the constructed product have serious implications for the health and safety of the workers involved, as well as the general public. Thus, due care, diligence and expertise are necessary safeguards.

Developing countries have an even greater need for leadership in construction. First, developing countries report more project performance deficiencies, such as cost and time overruns, poor work quality, technical defects, poor durability, as well as inadequate attention to safety, health and environmental issues (see, for example, Ofori, 2007). Second, the project management in these countries is fraught with many problems, due to the nature of the industries and their operating environments. In developing countries, the importance of effective management for stakeholders in construction projects is most evident in international projects, which are commonly large and complex projects (Ofori, 2003). On such projects, the teams are invariably multi-cultural, which underscores the need for leadership skills. Third, because the constructed product is critical to long-term national socio-economic development in developing countries, poor performance on construction projects has even more adverse implications. Finally, the clients, end purchasers, users and other stakeholders of construction in these countries are unaware of aspects of construction. This finding implies a need for professionalism among the construction project participants and a dedication to meet the objectives and aspirations of the stakeholders in the most innovative, imaginative and value-adding manner for the benefit of the client and all concerned. Thus, leadership should be a key feature in construction, as exemplified by its projects. In the next
The critical need for effective leadership in the construction industries of developing countries is discussed further.

The Need for Leadership in Construction Industries of Developing Countries

As mentioned above, construction industries in developing countries face formidable challenges. In a study on the competitiveness of the industry in Indonesia, Budiwobowo et al. (2009) found that the internal features of the construction industry, which they termed “factor conditions” of the construction cluster, were not highly rated for effectiveness. The 17 conditions were as follows:

1. geographical condition,
2. labour productivity,
3. level of technology for product development,
4. level of technology for business processes,
5. level of technology for construction plants and equipment,
6. quality of education,
7. flow of technology from higher educational institutions,
8. institutions for transfer of technology,
9. collaboration for technology development,
10. codes and standards for the construction industry,
11. implementation of policies,
12. role of professional associations,
13. role of construction associations,
14. role of construction services board,
15. role of government,
16. role of higher educational institutions, and
17. availability of basic infrastructure.

It is pertinent to note that all of the factors were rated 3.0 (on a scale of 1 to 5, where 1 = very poor and 5 = very good), except for the flow of technology from higher educational institutions and the role of higher educational institutions, which were rated at 2.0. Thus, practitioners in Indonesia view research and its application in the construction industry as having little relevance and impact. The study also found that the operating environment of the industry is unfavourable. The three attributes for “related and supporting industries” were all rated 3.0. These attributes included completeness of the supporting industries, quantity of the supporting industries and competitiveness of the supporting industries. Therefore, the construction industry participants in Indonesia perceive that it has major weaknesses and as a result, local enterprises and professionals cannot compete with their foreign counterparts. Thus, the former cannot take advantage of the favourable market conditions in the industry, which were noted in the study. It is striking that in this study leadership was not a feature highlighted for Indonesia’s construction industry.

Alinaitwe (2009) found the following top ten barriers to implementing lean construction in Uganda: inputs exactly when required, infrastructure in transportation and communication, capability of teams to maintain alignment with other teams, certainty in the supply chain, steady prices of commodities, reward systems based on teams’ goals, buildable designs, participative
management style for the workforce, parallel execution of development tasks in multi-disciplinary teams and accurate pre-planning. It is evident that most of these barriers can be effectively addressed with good leadership.

Even where practitioners are asked unambiguous questions on leadership, they ranked its importance at a low level. For example, in a study in Palestine, "leadership and motivation" was ranked as low as 17th in a list of 20 "skills important to contractors" (Enshassi, Mohamed and Ekarriri, 2009). The top-ranked skills were decision making, problem solving, financial management, project management, administration, risk taking, organisational, creativity, planning and goal setting, as well as delegation. Among clients, "leadership and motivation" were equally ranked at 12th among 21 important skills. The skills ranked above leadership were planning and goal setting, decision-making, problem solving, project management, financial management, attitude, administration, organisational, creativity, communication, negotiation and risk-taking.

From the discussion so far, the many levels of the construction industry clearly need leadership, especially in developing countries. First, at the industry level, there is a need for strategic leadership and championing continuous industry development and improvement. Second, the professional institutions and trade associations require effective leadership to ensure the development of member expertise and professionalism. Third, the construction companies must be led with competence and innovation considering the formidable challenges within the construction industries and their operating environments. Finally, leadership is key at the project level.

Research on Leadership in Construction

Many authors suggest that research on leadership in the construction industry is highly insufficient. Certain such authors include Keegan and Hartog (2004), as well as Chan and Chan (2005). Toor and Ofori (2008b) review leadership research in construction management literature and provide a chronological account of the key developmental phases. These researchers note that leadership research in construction dates back to the 1980s, when researchers began to examine leadership orientation and its influence on the effectiveness and performance of construction managers (see, for example, Bresnen, 1986). During the 1990s, leadership research in construction tended to focus on leadership style (Rowlinson, Ho and Ph-Hung, 1993; Dulaimi and Langford, 1999), attributes and behaviours (Muir and Langford, 1994; Zimmerer and Yasin, 1998). In this decade, the trend in construction leadership studies has shifted toward transformational leadership (Chan and Chan, 2005), power issues (Liu and Fang, 2006), cross-cultural issues (Toor and Ogunlana, 2008), leader emotional intelligence and leadership development (Skipper and Bell, 2006b). Studies on leadership behaviours, traits and styles in construction are still common (see Wong, Wong and Li, 2007; Songer, Chinowsky and Butler, 2006).

In one of the few works on construction leadership in a developing country, Limsila and Ogunlana (2008) found that transformational leadership is the major style for construction projects in Thailand. They found that transformational leadership generated better leadership outcomes than either the transactional or laissez-faire styles. Transformational leadership produces higher work quality and volume, as well as creative problem-solving by subordinates.
In addition to the adverse comments on the low volume of construction leadership research, the depth and variety of the studies and the approaches adopted have also been criticised. For example, Dulaimi and Langford (1999) argue that leadership studies on the construction industry primarily investigate the motivational factors and personal characteristics of project managers, even though researchers on leadership now argue that it is a multi-level and multi-dimensional phenomenon (see Yammarino et al, 2005; Avolio, 2007). Toor and Ofori (2008b) note that in the last decade there has been an increase in empirical leadership studies on the construction industry. However, much of the work is quantitative and focused on the behavioural dimension of leadership. Most of the studies lack depth in the methodology and analyses. There is an absence of empirical studies on construction using certain new concepts, such as ethical leadership, authentic leadership and servant leadership.

There are several reasons for the relatively low volume of work on construction leadership and two reasons are outlined here. First, social scientists undertaking research on leadership are uneducated on the construction industry (Langford et al., 1995) and the rich opportunities it offers for significant studies. Second, because the construction industry has tended to focus on management of projects and organisations, it has not stressed the importance of leadership, thus, the subject has not emerged as a worthwhile study. Finally, few researchers have the necessary skills and (in most countries) adequate funding for such work (Chinowsky and Diekmann, 2004).

Construction leadership has recently seen an increase in the level of interest and volume of works. Several developments suggest a bright new era for research on construction leadership. First, the CIB Task Group 64 Leadership in Construction investigated construction leadership in 2006–2010. This group’s objectives were as follows: to establish an international group to identify the issues facing construction leadership and to research the state of construction leadership and barriers for development, to broaden the current research of construction leadership issues by involving industry representatives and experts from different regional background and to raise the awareness of leadership issues within the construction industry and of the need for further research in this area (CIB, 2006). Second, dedicated journals have emerged, such as Leadership and Management in Engineering (published by the American Society of Civil Engineers) and Engineering and Construction Leadership. Third, streams of sessions devoted to construction have been included in major leadership conferences, such as the Second Biennial Gallup Leadership Institute Summit, Washington, DC in 2006. Finally, research centres dedicated construction leadership studies have been established worldwide (one example is the Centre for Project Leadership at Columbia University).

Leadership Development

There has been a long debate on whether leaders are born or developed. However, the current consensus appears to be that certain traits that are considered desirable for leaders in certain contexts may be naturally endowed, one can develop some, if not most, leadership attributes and capabilities through appropriate structured interventions. Thus, there have been attempts to study how leaders develop to aid in formulating these interventions. Avolio (2007) noted that leadership can be better understood by researching when, where and how it is
activated and how it makes a difference in team performance and process effectiveness. In their initial authentic leadership development concept, Luthans and Avolio (2003) stress the need to construct “taxonomies of trigger events” that promote positive leadership development. Such events may include influential role models and various significant others in one’s life, events and experiences, as well as social institutions that influence one’s behaviour (see also Avolio and Luthans, 2006). Similarly, others researchers, such as Rothstein et al., (1990) suggest that a leader’s personal history, trigger events, experiences at work, as well as personal and organisational factors may be potential antecedents to their emergence and effectiveness as leaders. The biographies of several political and business leaders have shown that challenges, struggles, obstacles, crises and dilemmas also aid in honing a potential leader’s talents (see Shamir et al., 2005). Exploring the antecedents also clarifies the contextual variables that play a mediating role in leadership development and emergence.

Leadership development is still a fledgling field that lacks a clear theoretical framework and the work is retrospective, although certain recent works are based on narratives (Sparrowe, 2005) and life stories (Shamir and Eilam, 2005; George and Sims, 2007; George et al., 2007) as important perspectives on leadership emergence and influence.

LEADERSHIP AND CONSTRUCTION INDUSTRY DEVELOPMENT

There is much need for leadership in construction industry development. The CIB Task Group 29 (1998: xiii) defined construction industry development as follows:

Construction industry development is a deliberate and managed process to improve the capacity and effectiveness of the construction industry to meet the national economic demand for building and civil engineering products and to support sustained national economic and social development objectives.

Construction industry development promotes: (i) increased value for money to industry clients as well as environmental responsibility in the delivery process, (ii) the viability and competitiveness of domestic construction enterprises and (iii) optimisation of the role of all participants and stakeholders through process, technological, institutional enhancement and through appropriate human resource development.

Table 1 considers the components of construction industry development suggested by Ofori (2011), as well as the relevance and merits of leadership in realising these components. In reviewing the lessons from industry development programmes around the world, Miles and Neale (1991) identified “strong and knowledgeable leadership” (p. 207) as the leading factor in success (among the six they outlined).

Among the definitions and characterisations of leadership considered above, Bennis’ definition (1989: 65), “The capacity to create a compelling vision and translate it into action and sustain it”, appears most apt to construction
industry development. It is possible and, arguably, desirable to consider construction industry development through the prism of authentic leaders. To realise the goals and objectives for construction industry development in poorer countries, championing industry development is a critical element. It is important to develop authentic leaders and followers to set the vision for improving construction industry performance by enhancing its capacity and capability in each country concerned. These leaders and followers should tackle the task of realising this vision with heart, tenacity, a sense of hope and self-transcendence.

Table 1. Leadership and Components of Construction Industry Development

<table>
<thead>
<tr>
<th>Component</th>
<th>Potential of Leadership</th>
<th>Leadership Tasks</th>
</tr>
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<tbody>
<tr>
<td>Technology development</td>
<td>Appropriate research and development to develop locally suitable technologies and foster innovation, transfer and diffusion of technology</td>
<td>Strategy formulation (including identification of need), monitoring, feedback and review</td>
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<tr>
<td>Corporate development</td>
<td>Fostering the continuous growth and prosperity of contracting and consulting firms in the construction industry, formulating and implementing programmes for developing construction enterprises</td>
<td>Effective corporate leadership, including strategy formulation and implementation, continuous business development, formulation and implementation of national policies, monitoring and feedback</td>
</tr>
<tr>
<td>Institution building</td>
<td>Building professional institutions and trade associations, creating umbrella groups for these entities to provide a common voice in the construction industry and establishment of a dedicated industry development agency</td>
<td>Leading the institutions to be a force for progress, engendering ethics and professionalism, strategy and policy formulation for collective championing of industry development</td>
</tr>
<tr>
<td>Materials development</td>
<td>Development of appropriate materials and components for economic, environmental, social and technical sustainability</td>
<td>Similar to and to be coordinated with technology development</td>
</tr>
<tr>
<td>Human resource development</td>
<td>Visionary identification of human resource needs in relevant areas and expertise levels and coordination of programmes to realise such requirements</td>
<td>Effective coordination of the government, industry and academic institutions, engendering a spirit of excellence</td>
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### Table 1 (continued)

<table>
<thead>
<tr>
<th>Component</th>
<th>Necessary Action</th>
<th>Leadership Tasks</th>
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<tbody>
<tr>
<td>Documentation, procedures and</td>
<td>Formulation of appropriate contract documentation with fair and equitable terms,</td>
<td>Collective leadership to develop appropriate documents and procedures for mutual</td>
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<tr>
<td>practices</td>
<td>adoption of procedures based on good practice rather than history</td>
<td>benefit</td>
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<tr>
<td>Operating environment</td>
<td>Development of a conducive operating environment for the construction industry</td>
<td>Collective leadership to influence the development of a facilitating environment</td>
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<td></td>
<td>that facilitates the performance of firms and individuals, fosters corporate growth</td>
<td>including educating other sectors on the construction industry and its needs</td>
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<tr>
<td></td>
<td>and enables the construction industry to play its role in national development</td>
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### RESEARCH AGENDA

Table 2 relates the relevance of leadership to the efforts to tackle research topics in the W107 research agenda that were published in the TG29 progress report in 2001 and answers the following questions. What are some key relevant issues? What is the relevance of leadership to these issues? An agenda for research on leadership and its development in developing countries is presented next. The agenda is followed by an agenda for research on construction industry development.

### Table 2. Leadership and the W107 Research Agenda

<table>
<thead>
<tr>
<th>Research Topic</th>
<th>Potential of Leadership</th>
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<tbody>
<tr>
<td>Poverty alleviation through construction</td>
<td>Construction providing maximum stimulus to other sectors of the domestic economy, using</td>
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<td></td>
<td>construction to generate maximum local without sacrificing efficiency, productivity and</td>
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<td></td>
<td>quality, as well as providing opportunities for well-paying jobs in construction and</td>
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<td></td>
<td>related sectors</td>
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<td>Sustainable construction in the context of</td>
<td>Designing constructed items and planning construction activity to ensure that the process</td>
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<tr>
<td>developing countries</td>
<td>and its products are sustainable in broadly defined terms</td>
</tr>
<tr>
<td>Project performance</td>
<td>Improving the performance on all construction projects to meet the entire range of</td>
</tr>
<tr>
<td></td>
<td>clients’ objectives and all stakeholder aspirations</td>
</tr>
</tbody>
</table>

(continued on next page)
Table 2 (continued)

<table>
<thead>
<tr>
<th>Research Topic</th>
<th>Potential of Leadership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety and health in construction, including community health and especially the relationship between construction and HIV/AIDS propagation</td>
<td>Construction is physically demanding and involves some danger and the sites may propagate diseases such as malaria, the workers may also spread HIV/AIDS in the localities surrounding the construction sites. Leadership is needed to protect workers on construction projects, people in the vicinity of these projects, users of the completed facilities and the general public from possible hazards from construction activity</td>
</tr>
<tr>
<td>Implications of privatisation for construction enterprises and practitioners in developing countries</td>
<td>Privatisation involves long-term risks for all parties involved. Firms in developing countries must build up their capacities and capabilities to undertake such projects. Leadership is needed to development appropriate privatisation programmes and policies to meet the national needs while providing opportunities for long-term domestic industry growth</td>
</tr>
<tr>
<td>Merits of a central agency for managing construction industry development in developing countries and potential of regional groupings of such national agencies</td>
<td>Industry development agencies can provide leadership and champion continuous performance enhancement in the construction industry. Leadership is needed to establish the case for such central agencies in managing construction industry development and to learn from the experiences of existing or defunct agencies</td>
</tr>
<tr>
<td>Implications of globalisation for local enterprises in developing countries</td>
<td>Firms and practitioners in developing countries should prepare to avoid the adverse impact of globalisation and take advantage of its positive aspects. Leadership at many levels is required for this endeavour.</td>
</tr>
<tr>
<td>Application of information technology for construction in developing countries</td>
<td>Construction professionals in developing countries should acquire the expertise to apply the tools available from the information and communications technology revolution in all relevant aspects of their work. Leaders should champion the establishment of a national strategy to facilitate the application of information and communication technology in construction.</td>
</tr>
<tr>
<td>Appropriate construction management and economic techniques for developing countries</td>
<td>Developing construction management and economic techniques and tools that consider the context of developing countries</td>
</tr>
</tbody>
</table>

Source: Ofori (2001)

**Agenda for Leadership**

It is evident from the discussion that more work is required for construction leadership in developing countries. Possible subjects for construction leadership development in developing countries are now considered.
1. How relevant is leadership to the role that the construction industry must play in addressing the particular problems of developing countries, such as attaining the Millennium Development Goals (MDGs), which include poverty alleviation, reducing infant and maternal mortality and improving housing and sanitation for slum dwellers?

2. How important is leadership to the tasks facing the construction industry in developing countries, such as improving performance on projects, dealing with acute resource constraints, providing work opportunities, developing the small and medium enterprises and realising the potential of the informal sector?

3. What is the role of leadership for the construction industry operating environment in developing countries, which include such features as a vacuum in regulation enforcement, a lack of appropriate and enabling policies, as well as poor development of physical infrastructure and supporting industries?

4. What type of leadership is suitable for construction projects in particular developing countries?

5. For construction leadership development in developing countries, what are the most effective approaches? What are the roles of government, industry and educational institutions?

**Agenda for Industry Development**

It is necessary for researchers on construction in developing countries to contribute to change in the broad area of the construction industry and, more importantly, to mainstream knowledge in their relevant fields. To this end, researchers working on this area should endeavour to enhance the quality of their work.

Studies should focus on contemporary issues, such as stakeholder management, information technology (with a concentration on new aspects such as building information modelling [IBM]), strategic management and innovation. Further, studies should consider these issues in the context of developing countries and how they relate to leadership and its development.

It is necessary to discern the interrelationships and integration among the key factors to explore synergies through combinations of the relevant and most compatible factors.

Developing countries differ greatly. It is necessary to find cogent categorisations in construction industry development to make appropriate and viable proposals for improvement and prioritise the key factors for various groups of countries.

**CONCLUSION**

Leadership has been studied by many philosophers, historians, political scientists and management authors and there is a large and growing volume of literature on leadership. Many constructs for leadership have been developed. Certain frameworks for formulating interventions that can be used to develop leaders have been proposed. Leadership is critical to construction projects, management
of such enterprises and industry development as a whole. The recent surge of interest in construction leadership research is encouraging because there is a gap in studies on leadership and its development, especially in developing countries.

The authentic leadership construct appears to encompass too many "positive" elements and seems to be too good to be realistic. However, it is the most suitable construct for construction industries in developing countries where vision is critical, hope, dedication and tenacity are needed, human relationships matter, doing things with the heart is important and the different (and often conflicting and competing) interests of many stakeholders must be considered in all endeavours.

Authentic leaders and authentic followers are critical to construction industries in developing countries. These leaders can make a difference at many levels, including, perhaps most importantly, the strategic level in the continuous development of the construction industry.

REFERENCES


