Chapter 14 Strengthening Sustainability in Sri Lankan Construction Industry: Through Corporate Social Responsibility



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Abstract Corporate Social Responsibility (CSR) is an approach for any kind of business organization to brand themselves as sustainable. Construction is an interwoven industry in the sectors of economy, environment, and society. In addition, it is a growing business entity with many stakeholders. CSR activities performed by Sri Lankan Construction companies could be categorized under three main branches such as philanthropic, business environment (BE) related CSR practices and CSR in business processes (BP). Yet there are ample opportunities for the industry to utilize the concept of CSR in their business processes (BP) related activities. Furthermore, it has been identified that many organizations undertake CSR only to furnish the legal requirement and customs. Apart from that lack of awareness and misconception regarding CSR, there are key constraints of adopting CSR in Sri Lankan construction industry. Thus, this research has focused on developing a practical guideline for construction companies to cater for sustainable development of Sri Lanka. Qualitative research study based on grounded theory through transcribing, coding and categorizing has been utilized as the key research method for this study. Twenty indepth interviews were carried out with client organizations, consultants, contractors and material manufacturers/suppliers to gather primary data and five focus groups to validate the data. Based on the analysis of primary data the final framework has been developed. This framework mainly focused on incorporating CSR to the business process, to its culture and strategies. Encouragement of green practices to construction organizations while inculcating a culture of greenery was the main determination behind this initiation.

Keywords Corporate social responsibility · Sustainability · Construction industry

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14.1 Introduction

Construction industry, which is considered as one of the focal industries in any nation, significantly affects triple bottom lines of sustainability: economy, environment and society. Construction industry metabolizes businesses involving clients, consultants, contractors, material producers, professional service suppliers, construction enterprises and many more. In a wide-spectrum, the construction industry is evident for an inferior ethical conduct due to unethical performances, health and safety tragedies and being insensitive towards the environment (Moodely et al. 2008). Thus, sustainability of the construction industry will depend on the sustainable practices in the construction businesses. This is where Corporate Social Responsibility (CSR) concept comes in, to encompass corporate sustainability expression with business operations. Corporate Social Responsibility (CSR) reveals the obligation of organizations for the impacts of its decisions and performances on society and the environment, through transparent and ethical behavior (ISO 2010).

Presently, construction industry activities are on the rise with the awakened development of Sri Lanka. Central Bank of Sri Lanka pointed out that contribution of Sri Lankan construction industry for GDP is 6% - 8% on average during the last decade whereas similar situation is observed for construction investment. On average, construction investments in Sri Lanka during the last decade accounted for 16% of the GDP (Ramachandra et al. 2013). Although many companies contribute positively to CSR activities, presently the construction industry has been frequently complaining for being inattentive for the environment (Tam et al. 2006; WBCSD 2009; Turk 2009); for being provoking with its clients and for being insensitive and hard-hearted toward the society (Jones et al. 2006a b; Qu 2007; Barthorpe 2010). Economynext article stated that, Sri Lanka has slipped 12 places to 95 among 177 countries that have been ranked on perceived corruption in the state sector in 2016, according to an index that measures transparency falling two years in a row (Economynext 2017). It has been pointed out that certain areas of the Sri Lankan construction industry are corruption prone (Perera 2014). Citing as an example illegal sand mining, where in certain instances even politicians too are involved. Perera (2014); further pointed out that there is no planning in the use of national natural resources and there should be proper monitoring of imported building materials. Perera (2014), further stated that; Sri Lanka's construction desperately needs a regulatory mechanism to manage and monitor this sector, which is threatened by widespread corruption. Thus, the need for realistic framework, which fits with the business environment of Sri Lankan construction industry leading for sustainable development, is becoming a critical issue since many activities of the construction industry are leading towards unsustainable practices harming the society and environment.

It has been revealed that the CSR activities among Sri Lankan construction business could be categorized under three main branches as; philanthropic, business environment (BE) related CSR practices and CSR in business processes (BP). Although the industry is focusing on philanthropic activities under the concept of CSR, yet there

are ample opportunities for the industry to utilize the concept of CSR in their business processes (BP) and business environment related activities in a more effective manner. This research is focused on developing a CSR guideline for construction companies to cater for sustainable development of Sri Lanka while incorporating CSR to the business process and business environment.

14.2 Literature Review

Through the mounting rapidity of change in the business environment, technological advances and globalization, sustainability has become an important social and economic issue throughout the world. Sustainable development has been defined in many ways, but the most frequently quoted definition is from 'Our Common Future' (also known as the Brundtland Report), the report of the world commission on Environment and Development, published in 1987. It states that 'sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs'. In the commercial world most businesses approaching to create a long-term consumer and employee value by creating a "green" strategy aim towards the natural environment while considering the business operation within social, cultural, and economic environments. To achieve Corporate Sustainability, the concept of Corporate Social Responsibility (CSR) has been recognized as an evolving part, which incorporates Corporate Social Responsibility (CSR) manifestation with business operations. Elkington (1998) discussed more into detail when arguing that companies should not only focus on enhancing its value through maximizing profit and outcome but also concentrate on environmental and social issues equally. The notion of CSR originally started in the 1950s as the result of World War II (Murray and Dainty 2009) and as argued by Zhen et al (2012); the fundamental impression of CSR is to focus at how the corporate world integrates stakeholders' requirements and societal ethics, to enhance the relationships between organization and society. Murray and Dainty (2009) accepted that CSR as one of the most crucial term in present business subjects. ISO 26000 defined CSR as:

The responsibility of an organization for the impacts of its decisions and activities on society and the environment, through transparent and ethical behavior.

CSR could be defined as an expression of corporate sustainability in terms of business case. Thus, there is a universal recognition as CSR is a crucial component to achieve Corporate Sustainability from a business viewpoint. CSR initiatives of businesses are mostly balancing the competing needs of shareholders and stakeholders (Bansal 2014). CSR Europe (2003) (cited in Kakabadse et al. 2005) stated that Corporate Social Responsibility is the way in which a company manages and improves its social and environmental impact to generate value for both its shareholders and its stakeholders by innovating its strategy, organization and operations.

With regard to construction businesses; sustainability refers to a beneficial outcome on a win-win basis by approaching towards an improved environment, developed society as well as achieving economic benefits for the construction business organization. Thus, pursuing corporate social responsibility (CSR) is significant to achieve sustainable construction (Shen et al. 2010).

It is a typical fact that the construction industry confronts many challenges and problems (De Silva et al. 2008). These problems range across developing countries as socio-economic stress, chronic resource shortages, institutional weaknesses and a general inability to deal with the key issues and changing government priorities due to various sociological, economic and political constraints (Chan et al. 2005). In Sri Lankan construction industry, fluctuating construction workload, unfair competition, skills drain and shortages as well as high cost of developing skills were the key acknowledged snags (De Silva et al. 2008).

Many stakeholders of the construction industry are directly influenced by construction activities in life, activities, asset values, jobs, friendships and longterm and short-term living plans. Thus, mismanagement of construction activities and its significant destructive impacts, jeopardizes the industry itself in long-term (Jones et al. 2006a, b). CSR acts as a tool to assist organizations in considering early rectification methods or strategies to minimize the negative effects on society and environment (Keyvanfar et al. 2018). In global context UK has shown considerable progress in CSR implementations whereas USA, China and Australia also working in this field (Duman et al. 2015). Accordingly, many researchers identified several potential CSR concerns as minimization of emissions, effluents and waste, improved biodiversity, energy efficiency, water efficiency and generate indirect economic effects (Lu et al. 2015). According to Zaho et al. (2012), protect the local environment, minimize safety hazards to the community, and establish good communication channels with neighbors are considered as possible CSR implementations. Ensuring harmonious relationships with local communities, employment from the local area (neighborhood) can also be utilized as CSR implementations (Hanyang Ma et al. 2017). Ensure transparent information disclosure, protect the local ecological environment, express concern over the community and public requirements, maintain social stability, protect local community environment are also considered as important in implementing CSR (Lin et al. 2017).

Through a study done on possible CSR practices that could be performed by client, consultant, contractor and material supplier organizations of the Sri Lankan construction industry, it was identified prevailing practices in CSR related to business environment and CSR related to business process could overcome some of the challenges related to social and environmental aspects in the industry (Somachandra et al. 2018a, b). It was found that cost-oriented nature of most client organizations, lower positive influence from government regulatory bodies, resource constraints, several unethical practices of construction professionals, client's values and client's apprehension for sustainability were suppressed by the client organizations from CSR initiatives (Somachandra et al. 2018a, b). It has further come to light that; in

contractor organizations, there is a considerable gap in the prevailing practice and required practice in the areas of CSR related to business environment and CSR related to business process although CSR related to philanthropic activities in the industry was at a high level. When studying the consultant organizations CSR initiatives, it has revealed that most of consultants have misconception about CSR considering it is all about charitable donations.

In similar strain awareness on sustainable approaches, deprived professionalism and unethical professional activities, use of strategies and lack of organizational social capital have limited the CSR initiatives among consultant organizations. Apart from that, misconceptions on CSR concept as philanthropic approach, poor ethical conduct and lack in professionalism, poor focus towards to morally obliged business process practice, limited process innovations and improvements towards sustainable production has been evident in material supplier organizations (Somachandra et al. 2018a, b).

Nevertheless, since almost all the stakeholders involved in this industry are cost conscious, quite high unethical business operation has been evident overruling the CSR essential practices that could be adopted for sustainability (Somachandra et al. 2018a, b). Thus, a proper framework to guide stakeholders in CSR practices for better social and environmental accountability has emerged to achieve sustainability in the industry.

14.3 Methodology

A qualitative study was carried out to develop this CSR guideline. In-depth interviews were carried out among client, consultant, contractor and material supplier organizations to identify the present CSR practices and possible modifications to the guidelines to adopt a better CSR process for sustainability. The qualitative study was based on a judgmental sample with interviews selecting five companies from each cluster. Transcribing, coding and categorizing of qualitative data were done to build and finalize the conclusions and CSR framework to fulfill the identified gap of the study.

14.4 Discussion

During the qualitative data analysis carried out based on transcribing, coding and categorizing, several gaps of prevailing CSR practices of the industry practitioners were identified. In order to fulfill the identified gaps following guideline was developed for client, consultant, contractor and material supplier organizations in Sri Lankan construction industry. This guideline has been built mainly based on three categories namely business process, business environment and philanthropic.

14.4.1 Business Process

Since the construction industry is always having an interwoven nature among all stakeholders; influential power of one stakeholder for the business process decision making of another stakeholder lies at a high level. Among all the stakeholders in construction industry, the client has more influential power; as they are the owner and the investor of the project. Thus, ethical and responsible decision making of the client in every stage of the project is vital. In order to take wise decisions to enhance the environmental and social impacts from the project, client organizations' awareness on sustainability initiatives is significant. Further to that clients' purchasing power and investment decisions, matters largely for the business process CSR implementations among their organizations. Here, clients' understanding on life cycle costing in financial decision making is again important. Moreover, client can encourage the consultant to initiate innovative resource conservation techniques, to use green materials and to develop more environmentally friendly and minimalistic designs. Meantime, ethical conduct like maintaining transparency when working with project parties, settling all the payments according to the contract and revealing all the necessary information that support the development directly impact the CSR initiatives in business process. Apprehension of the client towards morally obliged sustainable practice, attitudes and values also significantly affects the client organizations' business process CSR implementations.

Turning towards consultant organizations business process, it is the responsibility of consultants to encourage the client to use green materials while convincing the client with realistic cost-benefit analysis. Ethical and responsible decision making at every stage of the project while promoting environmentally friendly minimalistic designs is expected from consultant organizations. Technically, influential power is available for the consultant party in a project. Hence, based on the decisions made by consultants it can encourage or discourage the business process decision making of other project parties like contractor or material supplier. Developing a morally obliged business operation and sense of responsibility to work beyond the legal requirement needs to be implemented within consultant organizations for an innovative future in the construction industry. Utilization of innovative resource conservation methods during the designing stage is indeed for the implementation of business process CSR and it will lead to a smooth business process implementation for contractor or material supplier. Professionalism and professional conduct are other essential factors, which directly decide the long-term survival of any business.

For contractor organizations business process CSR implementations; there is a substantial impact for awareness, knowledge and interest on sustainable initiations among contractor party. Ethical and responsible decision making in every stage of the project along with attention to long-term impacts and benefits in decision-making is essential. Developing a morally obliged business operation and sense of responsibility to work beyond the legal requirements and ensuring the development of

innovative solutions for environmental and social impacts arise from the organization itself. Allocating a fixed budget for business process improvements and establish a department or unit for research and development to make sure that the organization operating based on an environmentally friendly and socially responsible framework will provide exclusive paybacks.

From material supplier standpoint, promoting environmentally friendly material manufacturing and supplying process (raw material extraction, manufacturing process, waste generation, etc.) is crucial. It is further necessary to carry out environmental impact assessment for all stages of the material (manufacturing, usage, and disposal). Considering quality of the material, durability and health and safety of material through the attainment of legal and safety requirements is having utmost importance since it directly affects the end user's satisfaction. Utilization of innovative resource conservation methods during the product designing and manufacturing stage will lead to an economized manufacturing process which increases the profitability of the organization. Meantime, fair competition and establishment of self-regulatory mechanisms to abide by the law is necessary to implement along with ethical decision making.

Maintain healthy relationship with project parties (effective communication, appropriate communication channel, corporate problem solving etc.), ethical and professional conduct of professionals is substantially important for all the stakeholders to maintain harmonious relationship. Furthermore, it is found that disappearance of business process CSR in consultant and contractor organizations, again lead the client in suppressing green initiatives (Somachandra et al. 2018a, b). This is due to the overwhelming factor and it further affirms the interwoven nature of construction industry through showing the impact of the practice of one organization or one party over other organizations or other parties' decision-making. Correspondingly, it needs to understand that there is a cyclic reaction in every action of every part of this industry. Thus, being genuinely and morally responsible is important to maintain the healthy relationships and to sustain in the industry as a whole (Table 14.1).

14.4.2 Business Environment

Concerning CSR related to business environment, focus directed to develop human capital of the organization is vigorous. Satisfied, loyal and skillful employees are a resource for an organization to achieve greater heights. Thus, educating the employees to enhance their skills is vital for human capital development. Recognizing employees is a further important factor. Development of top management commitment for ethical, environmentally friendly and socially responsible business environment is crucial for long-term survival of the business. Apart from that, adherence to organizational level policies to create a healthy working environment, ethical and fair treatment for all employees, provide all welfare facilities for all the employees, establish proper occupational health and safety procedures for employees and developing

Table 14.1 Business process CSR practices

Business process	3	
Environmental	Environmental friendly, ethical and responsible decisionmaking of stake holders	Environmental friendly high performance designs, use of sustainable materials, waste minimisation, consideration on energy efficiency in decision making
	Awareness on Environmental friendly concepts and positive impacts of those concepts	Awareness on concepts like sustainability, embodied energy, low energy building designs, zero waste concept, passive house concept and low carbon emission, understanding on life cycle costing
	Use of innovative resource conservation techniques	Solar power, bio-degradable materials, green insulations, building automation systems, low carbon processes, cool roof, sustainable resource sourcing, electrochromic smart glass, water efficiency technologies and appliances, energy efficiency technologies and appliances, sustainable indoor environment technologies
	Innovative solutions for environmental impacts	Waste management, re-use of waste, bio-gas generation, sell-waste accumulating in the site
	Develop and adherence to organizational level policies to minimize the environmental impact	Waste management policy, energy policy, quality policy
	Assess the impacts of the organization operation to the environment and minimise the impact	Environmental impact assessment, energy audits, environmental audits
Economic	Cost effective decision making considering long term impact	Minimalist designs, selection of cost effective durable materials, concern on life cycle cost impact in decision making
	Financial stability in decision making	Client's purchasing power in investing green initiations
	Long-term survival	Morally obliged sustainable business practices like ethical conduct and fair competition, developing term non adversarial partnership
	Invest on innovative solutions	Invest on possible research and development and process improvement approaches

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Business pro	ocess	
Social	Socially responsible decision making	Use of local materials, recruit local employees, use of healthy and safe materials
	Healthy relationship among project parties	Transparency and accountability, timely settlement of payments respect all the project parties
	Professional conduct	Professionalism and professional ethical behavior, having a code of ethics for the organization
	Develop and adherence to organizational level policies to minimize the social impact	Develop employment opportunities (discourage automation in areas of high manual workforce population

Source Somachandra et al. (2019)

code of ethics from organizational level and adhering to it is vigorous to maintain healthy working environment (Table 14.2).

14.4.3 Philanthropic

Almost all the stakeholder organizations in construction industry are already contributing for the charitable donations in different ways. However, it is noted that these charitable donations are diffused and not aligned with organizational strategies. Thus, movement towards to a strategic philanthropic approach, which focuses their corresponding charitable and philanthropic activities around a specific issue or cause, which will in turn support their own business objectives will further nourish the organization to support longstanding survival. Potential strategic philanthropic activities could be stated as follows (Table 14.3).

14.5 Conclusions

Corporate Social Responsibility (CSR) has been identified as an effective tool to overcome the challenges and introduce sustainable practices among construction stakeholders on their business decisions. During the investigation of prevailing CSR practices in Sri Lankan construction industry, it has evident that there is a considerable gap in the sectors of business process, business environment and philanthropic. Thus, formulating a framework to guide stakeholders in CSR practices for better social

Table 14.2 Business environment CSR practices

Business enviro	nment	
Environmental	Create healthy working environment	Clean environment for employees
	Educate employees	Provide training programs on environmental aspects
	Legal adherence	Establishment and improvement of corporate environmental management system
Economic	Invest on employee recognition	Give rewards and incentives to top performers
	Invest on human capital development	Invest on education employees, training programs, workshops, team building and leadership programs
Social	Educate employees	Provide training programs, professional coaching and mentoring, on-site education, perform team building activities
	Recognise employees	Encourage positive employee recognition
	Organizational environment	Promote a friendly organizational culture
	Availability of welfare facilities	Medical insurance, rest areas, lunch rooms, washrooms, lockers
	Develop and adherence to organizational level policies to minimise the environmental impact	Health and safety policy, recruitment policy, employee development plans, legal compliance on payments and other benefits, transparent annual performance and appraisal procedures
	Fair treatment for all employees	Equal opportunities, human right, disability, treat all employees ethically

Source Somachandraet al. (2019)

and environmental accountability along with morally obliged business practices has emerged. To cater that requirement above, CSR guideline was developed to fulfill the gap of prevailing practice in three clusters namely; business process CSR, CSR in business environment and philanthropic. The stakeholders of the construction industry will reach a win-win situation by using this model being sensitive to society as well as environment and achieving their enduring economic goals.

Strategic phil	anthropic
Environment	Organize tree plantation campaigns with school children
	Organize waste collection/clean up projects with school children
	Preserve environment scared resources from by-products of waste generated from the ore business (coral rehabilitation using cube test samples)
Economic	Create job opportunities from waste generated from the core business and get some margin from tem
	Organize fund raising programs to do donations for under-privileged people
Social	Provide internship opportunities for university students
	Sponse for industry related research conferences, research projects
	Keep workshop or seminars for school children
	Work closely with non-profit organizations in tobacco and drugs controlling
	take the responsibility in fund raising and fulfill a timely requirements in hospitals

Table 14.3 CSR practices related to strategic philanthropic

Source Somachandra et al. (2019)

References

Bansal T (2014) Don't confuse sustainability with corporate social responsibility. Available from http://www.huffingtonpost.ca/ivey-business-school/sustainable-business_b_5678831.html. Accessed 22 Jan 2018

Barthorpe S (2010) Implementing corporate social responsibility in the UK construction industry. Property Management 28(1):4–17

Chan JKW, Cheung R, Tam CM (2005) Monitoring financial health of contractors

De Silva N, Rajakaruna RWDWCAB, Bandara KATN (2008) Challenges faced by the construction industry in Sri Lanka: perspective of clients and contractors. Building Resilience, p 158

Economynext (2017) Sri Lanka corruption worsens in 2016: transparency index. Economynext [online] 26 Jan. Available at https://economynext.com/Sri_Lanka_corruption_worsens_in_2016__Transparency_Index-3-7176.html. Accessed 17 February 2019

Elkington J (1998) Cannibals with forks. The Triple Bottom Line of the 21st Century. Capstone Publishing, Oxford

ISO (2010) ISO 26000—guidance on social responsibility. The International Organization for Standardization, Geneva, Switzerland

Jones P, Comfort D, Hillier D (2006a) Corporate social responsibility and the UK construction industry. J Corp Real Estate 8(3):134–150

Jones P, Comfort D, Hillier D (2006) Corporate social responsibility and the UK construction industry. J Corp Real Estate 8(3):134–150

Kakabadse NK, Rozuel C, Lee-Davies L (2005) Corporate social responsibility and stakeholder approach: a conceptual review. Int J Bus Govern Ethics 1(4):277–302

Keyvanfar A, Khorami M, González Moya C, Cruz Cabrera M, Revelo Báez CN, Estupiñán M (2018) Rethinking construction corporate social responsibility practices: construction neighborhood

Lin H, Zen S, Ma H, Zeng R, Tam VW (2017) An indicator system for evaluating megaproject social responsibility. Int J Proj Manag Manag Econ 23:451–458

Moodley K, Smith N, Preece CN (2008) Stakeholder matrix for ethical relationships in the construction industry. Constr Manag Econ 26(6):625–632

Murray M, Dainty A (2009) Corporate social responsibility in construction industry. Taylor & Francis, Abingdon

- Perera Q (2014) 'Sri Lanka's construction sector beset with corruption', The Sunday Times, 02 March, Available at http://www.sundaytimes.lk/140302/business-times/sri-lankas-construction-sector-beset-with-corruption-87035.html. Accessed 17 Feb 2019
- Qu Y (2007) CSR research about construction enterprises. Constr Econ 7:94–96 (in Chinese)
- Ramachandra T, Rotimi JOB, Rameezdeen R (2013) Direction of the causal relationship between construction and the national economy of Sri Lanka. J Constr Dev Countr 18(2):49–63
- Shen LY, Tam VWY, Tam L, Ji YB (2010) Project feasibility study: the key to successful implementation of sustainable and socially responsible construction management practice. J Clean Prod 18(3):254–259
- Somachandra WDIV, Sylva K, Dissanayaka PBR (2018) Business process CSR toward sustainability: contribution of the client organizations of construction industry. In: 9th international conference on sustainable built environment 2018 (ICSBE), Kandy, Sri Lanka, December 13–15, 2018, Proceedings. Department of Civil Engineering, University of Peradeniya
- Somachandra WDIV, Sylva K, Dissanayaka PBR (2018) Construction industry focus towards sustainability through corporate social responsibility. In: International conference on disaster management (ICDM 2018), Padang, Indonesia, May 2–4, 2018, Proceedings
- Tam VWY, Tam CM, Zeng SX, Chan KK (2006) Environmental performance measurement indicators in construction. Build Environ 41(2):164–173
- Turk AM (2009) The benefits associated with ISO 14001 certification for construction firms: Turkish case. J Clean Prod 17(5):559–569
- WBCSD (World Business Council for Sustainable Development), August 2009. Transforming the Market: Energy Efficiency in Buildings. WBCSD
- Weisheng L, Ye M, Flanagan R, Ye K (2015) Corporate social responsibility disclosures in international construction business: trends and prospects. J Constr Eng Manag 142(1):04015053
- Zhen YZ, Xiao JZ, Kathryn D, Jian Z (2012) A corporate social responsibility indicator system for construction enterprises. J Clean Prod 29–30:277–289