KEY WORDS
Construction Neighborhood, Socially Sustainable Construction Management, Construction Corporate Social Responsibility.

INTRODUCTION

Construction is well known for its highly negative social impact. Neighborhood-related CSR activities have been practiced in construction since the Hammurabi times (nearly 3,700 years ago) [1] when a set of rules were established to protect affected people from urban development. Construction neighborhood is a community area and/or group directly influenced by construction activities, including changes in the way of life, activities, asset values, jobs, friendships, and long- and short-term living plans. If such changes are mismanaged, the consequential negative effect may jeopardize a construction project (i.e., societal risk) (Jones, Comfort, and Hillier (2006) [2]). Construction fails to cover the risk properly. Overestimating social-carrying capacity always results in the irrational behavior of citizens, leading to a lose-lose situation. An example of such a situation is any case wherein resettlement (as a “firefighting strategy”) is the only way on progress. Generally, corporate social responsibility (CSR) is the main business approach employed to regulate such a risk. It is while construction CSR is not properly considered the neighborhood to address the risk. Method: Using the structure of CSR elements in the literature as a basis, this study critically reviews and argues CSR direction. Findings: The argument is outlined observed issues on CSR role, objective, stakeholder, and activity setting as well as comprehensive integration and CSR direction, and highlighted that CSR directions should be re-examined. Significance: This work intends to shed light on the field to redirect the efforts for better construction CSR practices.
In the following sections, the study investigates CSR elements and lists a set of observed issues in the current CSR research and practices.

**OBSERVED ISSUES**

CSR has shown a great potential to mitigate social risks [18, 19]. Construction with an engineering nature [20-22] has been trying to localize CSR to its day-to-day activities. Several symptoms are associated with the poor adaptation and implementation of CSR in the construction industry. Duman, Giritli, and McDermott (2015) [4] reported that CSR is practiced more in developed countries than in developing ones and by large or international companies than SMEs (Lazarevic (2008) [10]). Also, CSR is only considered for mega projects (Duman, Giritli, and McDermott (2015) [4]).

From the extent of research, reports are merely observations, playing a passive role in the transformation of CSR to a problem-solving strategy. For example, existing research does not focus on proposing a CSR activity scientifically, put forward a system to engineer the implementation benefits, and then measure and validate the resulting stakeholder satisfaction/dissatisfaction.

The current study focuses on the observed issues associated with each CSR element. Five CSR elements are investigated in the construction literature [Table 2], including driving roles, objectives, stakeholders, activities, and integration plans. The arguments report issues on CSR role, objective, stakeholder, and activity setting as well as comprehensive integration.

<table>
<thead>
<tr>
<th>Elements of CSR in construction</th>
<th>Description</th>
<th>Citation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Driving roles</td>
<td>Studies studied or briefly covered the driving role of CSR from the perspective of the construction industry</td>
<td>[4], [2], [11], [12], [13], [10], [14], [15]</td>
</tr>
<tr>
<td>Objectives</td>
<td>Studies attempted to cover CSR objectives from the perspective of the construction industry</td>
<td>[4], [15], [16], [17], [12], [13], [10], [9], [3]</td>
</tr>
<tr>
<td>Stakeholders</td>
<td>Studies attempted to identify or introduce CSR stakeholder in the construction industry</td>
<td>[4], [2], [11], [7], [12], [13], [14], [8], [6], [9], [3]</td>
</tr>
<tr>
<td>Activities</td>
<td>Studies attempted to identify or establish or briefly cover a set of CSR activities in the construction industry</td>
<td>[19], [4], [2], [11], [17], [7], [13], [14], [10], [8], [6], [9], [3]</td>
</tr>
<tr>
<td>Integration plans</td>
<td>Studies attempted to highlight the problem of CSR isolation, propose a solution or briefly cover CSR integration</td>
<td>[4], [2], [11], [9], [3]</td>
</tr>
</tbody>
</table>

### Table 2: Elements of CSR in construction literature

### Table 1: Reviews on construction neighborhood as a stakeholder

<table>
<thead>
<tr>
<th>Stakeholders</th>
<th>Construction neighborhood as a stakeholder</th>
<th>Potential CSR concerns</th>
<th>Ref.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees, clients, future users, shareholders, suppliers, and particularly, local community and the public</td>
<td>Indirectly considered under public and local community</td>
<td>Emissions, effluents and waste, biodiversity, energy, water, indirect economic effects</td>
<td>[7]</td>
</tr>
<tr>
<td>Employees, customers, shareholders, creditors, suppliers, and partners, environment and resource agencies, local communities, government, competitors, and NGOs.</td>
<td>Indirectly considered under project impact on the community</td>
<td>Protect the local environment, minimize safety hazards to the community, establish good communication channels with neighbors</td>
<td>[8]</td>
</tr>
<tr>
<td>Clients, Creditors (financial partners), employees, EPA, future users, governments, local community, NGOs, partners, shareholders, and suppliers/subcontractors</td>
<td>Indirectly considered under EPA and local community</td>
<td>EPA (water, land use, waste disposal, pollution emission, etc.), local community (project impact on the community, good communication channels with neighbors, etc.)</td>
<td>[6]</td>
</tr>
<tr>
<td>Governments (state, local, functional departments, etc.), society (media, community, NGOs, the public, etc.), and businesses (designers, supplier contractors, etc.)</td>
<td>Indirectly considered under business–society relations (stakeholder issues)</td>
<td>Harmonious relationships with local communities, employment from the local area (neighborhood)</td>
<td>[9]</td>
</tr>
<tr>
<td>Government, media, designers, and project legal personnel (contractor, supervisor, supplier, operator, public community, NGOs)</td>
<td>Indirectly considered under government, operator, media, and the public</td>
<td>Governments concerns (ensure transparent information disclosure), operators concerns (protect the local ecological environment), media concerns (express concern over the community and public requirements), the public concerns (maintain social stability, protect local community environment)</td>
<td>[3]</td>
</tr>
</tbody>
</table>
CSR role-setting issues: CSR in construction has been in practice since the 1990s. CSR drivers for construction companies lean more toward social promotional strategy than a social problem-solving strategy. To illustrate, Barthorpe (2009) [14] indicated that being a “corporate citizen” add “credibility” and “enhance reputation.” Evangelinos et al. (2016) [15] claimed to be responsive to non-financial aspects of performance. Lazarevic (2008) [10] indicated driving toward “local community protection and engagement.” Based on his findings, the current practices focus more on engagement than protection to drive “effective and efficient building and constructing service as well effective management” of a business. Although Lazarevic (2008) [10]’s interpretation is better than the common one, the attention to problem-solving strategy remains missing.

Extant literature introduces CSR in construction as a strategy to increase the social caring capacity. Increasing social caring capacity is an attempt to induce people’s tolerance to the negative impact they are facing for the sake of future benefits. Although no study exists for measure such success, the prevailing perception is unsustainable. Even if such idea is a forward-thinking method of role setting, the attempt remains a kind of “painkiller pills,” that is, “killing the pain without trying to address the cause.” In this situation, the construction industry is losing credit to develop an effective solution to rectify the problems while expanding CSR activities.

CSR objective-setting issues: Existing research fails to consider the functional analysis of CSR objectives as well as vision, mission, and target setting.

Schultz and Castello (2013) [16] classified characteristics of the instrumental, political-normative, and communication views on CSR. Lin et al. (2017) [12] defined three CSR perspectives, namely, profit, value, and relationship. Foreseeing the key role of functional analysis is possible for readers, but it is not considered as critical as it should be. Building social trust or branding by focusing on customers, NGOs or authorities is a common understanding of CSR practices. However, minimum attention is given to construction neighborhood, which should be basic. The minimum role of CSR that should be considered is the “must be there” social criterion (i.e., “basic operational” or “non-spoken” social criteria). Normally, perspective and paradigm in CSR focus on future value and profit, and this attention leads to forgetting the basics.

Moreover, construction companies perceive of a long-term return is frequently reported as a CSR implementation driver [4]. Defining CSR only as a long-term construction strategic management activity seems to be a common understanding. Thinking of CSR long-term return in terms of vision, mission, and target setting is another objective-setting problem. Construction is a short- medium-term profit-oriented industry. Thus, the orientation of CSR activities as a long-term strategy discourages considering the short-term duties. For example, CSR “...is a process and structure in which companies are directed and controlled to achieve long-term shareholders’ goals concerning the interest of other stakeholders” [10]. As a result, construction neighborhood, which traditionally causes expense rather than creating profit, is forgotten. As such, long-term perception is only under the scope of international and mega project construction companies instead of SMEs for implementing CSR practices [4]. This limited scope is a side effect of long-term CSR objective setting.

CSR stakeholder-setting issues: CSR practices focus less on local community and neighborhoods. As evidence of this common practice on CSR, the phrase “outside stakeholders,” also known as “non-shareholder stakeholders,” is considered for construction neighborhood (Lin et al. (2017) [3]). Zhao et al. (2006) [6] investigated that CSR “...issues about clients, suppliers, partners, shareholders, and employees carry more weight than those concerning creditors, local community, environment, and competitors.” Moreover, Jones, Comfort, and Hillier (2006) [2] stated that “some construction companies report their involvement in wider community initiatives and their charitable contributions to local communities.”

Traditional thinking considers organized community group as construction stakeholder. In the old social power theory, “...most public people are not organizational but may be strongly influenced or guided by social organizations, such as the media, and NGOs” (Zeng et al. (2017) [9]). In the arena of social media, social network, and online communication, concurrent social power theory is different from the past. Lin et al. (2017) [12] indicated that this theory covers the ability of one stakeholder to influence the interest of another stakeholder (s). Only considering structured and organized or semi-organized community groups (with a direct benefit or formal legal binding and influence) is not promising. Construction neighborhood is even a non-organized community, but with the aid of communication technology, such community can be a bigger threat than an organized one.

To ensure the fulfillment of social demands, further research must identify the problems related to construction neighborhood. Development will then aid all parties involved in a construction project to construct a stable power construct in executing construction activities.

CSR activity-setting issues: Even the implementation of CSR activities serves as pertinent history in construction (Barthorpe (2009) [14]), the formal CSR implementation has been imported from social science discipline. That is why the scope of CSR solution is just limited to social science techniques with regard to adaptation and mitigation of construction issues. The earlier discussed social-carrying capacity role setting is one of the examples of such an adaptation of a social science method of thinking to
construction CSR. Available online literature presents a few pieces of evidence to this argument. Barthorpe (2009, Table 2) [14] reported a good set of examples, such as charity, social funds, and local recruitment, also known as stylish CSR activities. “Good communication with neighbors,” use of “project newsletters,” “providing up to three days paid leave per year to enable its employees to participate in approved local community projects,” “work with disadvantaged members of communities,” “race days, raft races, and marathon runs to raise money for local charities,” “working with schools to promote children’s life skills and it encourages employees to take part in charitable and community-based events” are a few of the successful examples in the literature (Jones, Comfort, and Hillier (2006) [2]). Zeng et al. (2017) [9] mentioned problems, such as “irrational behavior of the local community” and “unethical behavior local governments;” and possible solutions, such as community behavioral consultation to “think rationally” and “fair reporting by the media and proactive coordination by NGOs.”

Although construction can be proud of all these ethical activities introduced by CSR to the industry, where are the business-oriented construction solutions? If construction neighborhood has been considered a key and basic stakeholder of CSR, then, we should have site planning CSR strategies, solutions, and activeness. The same applies to scheduling, resource management, and so on. As an expected result, Duman, Giritli, and McDermott (2015) [4] mentioned, “yet, many companies in this industry are having difficulties in integrating their social, ethical and environmental concerns into their operations and stakeholder interactions.”

CSR comprehensive integration issues: Substantial efforts have been exerted on the professional integration of collaborative and concurrent engineering in construction. However, construction remains an isolated industry in strategic planning, and this status also affects CSR implementation. The relevant number of studies with the integration focus remains low, and only a few investigated the lack or the importance of CSR implementation (Duman, Giritli, McDermott (2015) [4]. In construction, we have several paralegal strategic efforts toward social impact management that may cover the social needs of construction neighborhood. However, the literature does not present adequate effort on the comprehensive integration of CSR to social impact assessment, sustainability, and socially sustainable assessment, construction risk assessment as well as parallel sustainable neighborhood assessment (SNA) discipline in urban planning and design research. Each discipline reports efforts toward sustainable social construction neighborhood under specific areas [Fig. 1]. Rethinking integration with the other disciplinary findings is a great improvement for these segmented research studies to boost the coverage and improve the scope of service. The ultimate consideration of the best CSR solutions is possible if it is based on the background of the effort of all parallel disciplines on the problems, causes, effects, and best practices. Such isolation partly explains why CSR remains not considered a problem-solving strategy with a direct financial return.

---

Contribution of construction companies, can boost R&D ecosystem, to help solve the industry problem, as well as promoting R&D habit, culture, and experiences in the construction industry.

**CONCLUSION**

This effort has been made to redirect the attention of researchers on the future development of CSR literature to construction neighborhood. CSR elements have been investigated through literature review. Relevant construction neighborhood CSR implementation issues have been discussed under each element. These issues are on CSR role, objective, stakeholder, and activity setting as well as comprehensive integration. This study has been reported with the aim to inspire the rethinking of construction CSR practices. One of the most significant solutions proposed is the integration of CSR with the R&D sector. Possible information that can contain in the CSR report, as well as possible CSR financial contribution of construction companies, can boost R&D ecosystem, to help solve the industry problem,
guarantee a financial return to expanding companies. This report has consistently inspired readers to consider CSR as a business solution strategy with possible short-term return rather than merely for branding and seeking a long-term return.

CONFLICT OF INTEREST
The authors do not have any conflict of interest.

ACKNOWLEDGMENTS
We would like to thank the anonymous referees for their helpful suggestions that substantially improved this article. This report presents the research conducted with support from the UTE as a part of an effort (over 3,000 man-hours of research to collect and process approximately 35,000 data) in the Ecuador construction industry. Our mission is to provide demand-driven results on sustainable solutions to the current construction problems in the construction industry. We trust the current collaborative research output results in a win-win scenario for the future sustainable construction industry. To this end, we are honored to receive the humble and dedicated support of Dr. Ricardo Hidalgo Ottolenghi, the director of UTE, as well as Dr. Madam Myriam Larco, dean of the UTE Faculty of Architecture and Urbanism, whose forward-thinking substantially contributed to the success of this program.

FINANCIAL DISCLOSURE
The research was supported by Universidad Tecnológica Equinoccial (UTE), Ecuador

REFERENCES