Research and Development of Korea B(Benefit)-impact Model for Sustainable Development - in Case of Construction Sector -

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Abstract The purpose of this study is to research and development of 'Korea B(Benefit)-impact Model' for Sustainable Development. A concept evaluation model is 'B(Benefit)-impact model' in U.S.A. We use the results of surveys that examined the importance of social value issues to stakeholders in Korea to implement the benefit-impact model in Korea. In particular, in this paper, we use the KSI(Korean Sustainability Index) survey data conducted by the Korea Standards Association to evaluate the social value of the construction industry for representative stakeholders in the construction industry. The social value pool and the activity indicator pool used for the survey are created based on relevant International Standards; ISO 26000, ISO 14001, ISO 37001. As a result, Korea B-impact model for construction industry included the following five core social value issues; Strengthen transparency of corporate management, Ensure fair employment and employment relations, Efforts to prevent corruption, Conduct fair competition, Efforts to prevent environmental pollution. In addition, the US B-impact model has three limitations. First, it is unclear whether the key indicators have been derived while considering all issues of social value. Second, US B-impact model indicators are developed by the social responsibility experts, so it is necessary to review by stakeholders in each industry. Finally, it would be more effective for companies to use the B-impact model index as a more detailed activity indicator. When developing a Korea B-impact model, the following methods are used to supplement it. First, we reviewed all social value issues using international standards. Secondly, we used the KSI(Korean Sustainability index) survey results to derive the importance of the social value issue of construction industry in Korea. Finally, we have clearly matched the activity indicators by social value core issues based on the GRI Standard so that companies can actually use the Korea B-impact model for the construction sector. The detailed development stages and results of this study are as follows;

Keywords: Sustainable Development, Social Value, Social Responsibility, Sustainability, B-impact Model, CSR, Construction Sector

1. INTRODUCTION

In recent years, the Korean government, consumers, and local communities have strongly demanded the corporate social responsibility for the sustainable development of society. This

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is because social losses are constantly generated by business activities and operations that ignore social responsibility of some companies; tax evasion and environmental pollution(exhaust gas manipulation), consumer safety threats (humidifier damage, leukemia occurrence), going on a power trip (extrusion sales), unfair labor practices (Safety of irregular workers) etc.

Therefore, in today's world, it is necessary to go beyond the level of selecting products and services with price and quality (performance per price), and to be able to choose the products and services of companies that fulfill their social responsibility. We need to provide information for that choice. In this paper, we try to model the priorities of social responsibility information required by various stakeholders constituting the society in a universally valid and objective way. In particular, we will first derive what the social value index is in the construction sector, which has a great social impact, and develop 'Korea B-impact model' for the construction sector based on this. The 'Korea B-impact model' to be implemented in this paper, also like that of the US, is intended to make it possible for third parties to verify the major social value issues of the construction industry.

2. RESEARCH METHODS AND PROCEDURES

The concept model of this study is the 'B(Benefit)-impact model' in U.S.A. Companies can measure their own level of social responsibility based on the 'B-impact model'. In addition, if the measurement results are submitted to B-lab, it confirms the authenticity of the measurement results through sampling survey and then authenticates. This model is an effective tool to check the degree of social responsibility performance of the companies in the same industry. Therefore, this paper attempts to develop the 'Korea B-impact model'.

However, the 'US B-impact model' has three limitations. First, it is unclear whether the issues included in the 'US B-impact model' are derived from the core issues of social responsibility. As the definition and scope of social value can be interpreted in various ways, the key aspects to consider in developing the model are universal consensus on the scope of the company's social value and related issues.

Second, 'US *B-impact model*' indicators are developed by the social responsibility experts, so it is better to review by stakeholders in each industry.

Finally, it would be more effective for companies to use the 'US *B-impact model*' index, if it consists of detailed activity indicators.

I would like to use the following approach to overcome these three limitations and develop the Korean model.

First, we use international standards related to social responsibility to form 'social value issue pool.' This is because international standards have been developed based on the consensus of various stakeholders and experts. In order to meet this requirement, we will study standards which represent social value; ISO 26000, ISO 14000 and ISO 37001.

Second, based on the results of the KSI (Korean Sustainability Index) survey conducted by the Korea Standards Association in order to derive the social value issues that are particularly important in the construction industry, the importance of the social value issue of the Korean construction industry was derived.

Since 2009, the Korea Standards Association, an affiliate of the Ministry of Trade, Industry and Energy, has selected key issues of social value for stakeholders in main industries and evaluated and indexed the level of corporate social responsibility based on this.

Finally, we have matched the GRI standard's activity indicators to the key issues of social value derived above.

Through this, construction companies can check the level of social value by activity indicators themselves, and can improve according to the PDCA cycle.

We also want to develop more sophisticated 'Korean impact model' based on 'Six Step Method for the Identifying Key Performance Indicators' proposed by the Hauser center at Harvard University. To briefly describe these six steps are as follows;

First, we set up universal and definite issue pool that anyone can admit. In the second stage, the industries that apply to the indicators to be developed are determined, and if there are similar industries, all relevant issues are combined into the issue pool. In this paper, we will study and use international standards related to social responsibility for stages 1 and 2.

Third, develop a materiality assessment model to derive important social value issues. In this paper, we will use AA1000's 'materiality test' to derive important social value issues. This is because AA1000's materiality test is highly reliable, since it is an evaluation model created by 'AccountAbility' which establishes the basis for the verification of social responsibility reporting. Fourth, we conduct the materiality assessment with the issue pool, and fifth, we derive the priority of the issue. The most important factor in determining the importance and prioritization of AA1000's materiality test is the relevant stakeholder survey. Therefore, we want to use the KSI survey results of the Korea Standards Association at this stage. This is possible because Korea Standards Association's KSI Survey is based on a pool of social value issues such as ISO 26000. In order to model the social value of the Korean construction industry, it is necessary to conduct a survey to select issues that are considered important by Korean stakeholders in the construction industry, among the issues of social value presented in International Standards. Once the major social value issues of the Korean construction industry are selected, we will finally match the activity indicators to be managed by each issue. We want to use the GRI standard as a pool of activity indicators that companies need to manage.

3. THEORETICAL BACKGROUND OF RESEARCH

The theoretical background and the survey mainly targeted international standards, which are as follows.

The reason for preliminary review of international standards on social value is to review all of the agreed social value issues globally. This part was omitted when developing the US model, and it was supplemented and reviewed in development for Korea B-impact model.

(1) ISO 26000

It is an International Standard for social responsibility that defines social responsibility activities based on seven themes: governance, human rights, labor, environment, fair operating practices, consumers, and community participation. 77 countries around the world participated in the development of this standard and were the longest discussed in the history of international standardization, with 93% of votes in the final vote. In particular, the Social Responsibility Working Group (WG SC), which led the development of standards, has reached consensus for more than five years based on the participation of hundreds of experts and practitioners representing six major stakeholder groups; enterprise, government, consumer, labor, NGO, service and support. Since the enactment in 2010, more than 80 countries have either adopted national standards or used it as a trade barrier, and global leading companies have designated ISO 26000 as a key consideration in their supply chain management.

(2) ISO 14001

Since the Rio Earth Summit in 1992, environmental management has emerged as a new business management paradigm as management techniques to achieve environmentally sound and sustainable development. The ISO 14001 environmental management system has been developed by the International Organization for Standardization (ISO), which enables companies to efficiently manage environmental risks by systematically identifying, assessing, managing, and improving environmental issues related to their businesses. ISO 14001 helps an organization achieve the intended outcomes of its environmental management system, which provide value for the environment, the organization itself and interested parties. Consistent with the organization's environmental policy, the intended outcomes of an environmental management system include: enhancement of environmental performance, fulfilment of compliance obligations, achievement of environmental objectives.

(3) ISO 37001

In order to prevent corruption globally, efforts to prevent corruption have been continued in the UK, including the issuance of the Bribery Act in 2010. 37 countries are participating as active members worldwide, Transparency International (TI) and the Organization for Economic Cooperation and Development (OECD), which announce corruption-related indices, formulated ISO 37001.

ISO 37001, Anti-bribery management systems, specifies a series of measures to help organizations prevent, detect and address bribery. These include adopting an anti-bribery policy, appointing a person to oversee anti-bribery compliance, training, risk assessments and due diligence on projects and business associates, implementing financial and commercial controls, and instituting reporting and investigation procedures.

(4) GRI STANDARD

The GRI standard is a representative Universe of Sustainability Index developed by the Global Reporting Initiatives (GRI), and is used by tens of thousands of companies around the world to report on sustainability reports. Based on the organization's impact on the environment and society, to report to stakeholders what activities they are doing. The GRI was first established in 1997. In 1989, before the GRI was built, a US tanker, Exxon Valdez, which was carrying 220,000 tons of crude oil, was stranded on the reef near Alaska coast. The incident caused 40,000 tons of crude oil to leak into the Alaska coast causing extreme environmental pollution. After the accident, American environmental group, CERES (Coalition for Environmentally Responsible Economics) established an international organization called GRI in 1997 with the United Nations Environment Program (UNEP) to prevent the recurrence of such accidents.

(5) Social value Model for finding important issues in Construction sector.

The AA1000 materiality test model is a widely used model for selecting social value issues globally. AA1000 is a standard for social auditing and reporting developed by the AccountAbility group. It is used as a standard for verifying the sustainability report of more than 50 global corporations as well as global companies such as BP, Ford and NIKE. The AA1000's methodology for assessing the importance of AA1000 is as follows: First, to identify key issues of social value, relevant stakeholders should be selected. Second, social value issues that impact the society should be derived based on the needs of stakeholders. Finally, it is important to prioritize the issues to be urgently addressed from the issues raised by the stakeholder survey. These urgent issues should finally be managed as an indicator. Figure 1 shows that internal and external stakeholders are involved and that companies should prioritize social value issues that affect society. Figure 2 shows representative stakeholders to consider when conducting materiality assessments. This is why the selection of stakeholders in the construction industry should be the first priority when selecting social value issues in the construction sector. (Source: AA1000 Accountability principles 2018)



Figure 1. Materiality Determination (Source: AA1000 Accountability principles 2018)



Figure 2. Establishing Inclusivity (Source: AA1000 Accountability principles 2018)

The theoretical validation of this materiality model can be found in The Hauser center at Harvard University, which is famous for its social value investment research, and also in the Six Step Method for identifying Key Performance Indicators. This research report describes the six step method for selecting key indicators. This is largely divided into three types. First,

create an important issue pool, Secondly, classify it by industry. Finally, conduct materiality test and prioritize the issues. (Source: *From Transparency to Performance*, The Hauser Center at Harvard University)



Figure 3. Six Step Method for identifying Key Performance Indicators (Source: From Transparency to Performance,

The Hauser center at Harvard University)

4. BENCHMARKING SOCIAL VALUE ASSESSMENT METHODS

Evaluation standards for good companies operated by some local governments and agencies in Korea are ambiguous, and there are many cases in which they are evaluated only for social contribution activities or donations. This is because it is very difficult to objectify to social responsibility. The 'B-impact model' operated by B lab, a US social responsibility assessment organization, is a tool for assessing corporate social responsibility. B lab gives the B corporation certification with the results of the 'B-impact model', which is linked to the government certification of Benefit Corporation in the United States. It is just like the official recognition that a US company is awarded a certification of Benefit Corporation as a good company.

The scope of verification is divided into 'Inclusiveness,' Materiality', and 'Reliability'. 'Inclusiveness' is to see if key stakeholders have participated to derive important social value issues. 'Materiality' is to ensure that important activity indicators are derived through appropriate Materiality test of important social value issues derived from stakeholders.

Finally, 'Reliability' is to ensure that the performance of the activity indicators is accurate without falsehood. Among these, the method of confirming the 'Reliability' of the performance is again divided into a method of confirming the performance level directly by the third party and a method of self-declaring that the company reports it without lie.

The US *B-impact model* is in the form of self-verification, and '*EcoVadis evaluation checklist*', known as the Corporate Social Responsibility (CSR) supply chain assessment tool, is also in the form of self-verification. This is because the reporting and verification of corporate social value issues are not yet mandatory, so most companies do not have a reason to increase the level of verification in reality.

5. DEVELOPMENT OF KOREA B-IMPACT MODEL.

(1) Derive 'Social value issue pool'

First, we gather the social responsibility crisis or opportunity factors applicable to all industries. Issues that are a crisis or opportunity for social responsibility can be listed on the basis of the issue of ISO 26000, the international standard for social responsibility. The issues of ISO 37001 are covered in the 21st issue of ISO 26000, and the issues of ISO 14001 are also included in the 17th to 20th issues of ISO 26000, so there is no need to distinguish them separately. In other words, ISO 26000 is a high-level standard that covers all relevant standards of social responsibility. Therefore, it is the most MECE (Mutually Exclusive and Collectively Exhaustive) approach to create an social value issue pool based on ISO 26000. The MECE approach is the most important in the early stages of the development of indicators. This can be effectively addressed by using international standards derived from agreements of several tens of thousands of stakeholders and experts from more than 77 countries. However, as economic, social and environmental factors change over time, additional reviews of new issues will be needed, so it will be necessary to review them at every revision of the standard.

(2) Identify stakeholders in the construction sector and select important social value issues

Korean Standard Association (KSA) surveyed the stakeholders related to the construction industry and surveyed the social value issues of the construction industry that have a great impact on the Korean society. Particularly, Korean Standard Association has conducted surveys to identify stakeholders (consumers, employees, shareholders, and local residents) in major construction companies in Korea over the past decade.

Therefore, using the results of the KSA' survey of the construction industry, it can meet the Inclusiveness and Materiality of selecting important social value issues in the construction industry. In this section, we will derive important social value issues of the construction industry based on KSA's construction industry survey data for 2017.

This is possible because KSA's questions are made identically based on the social value issues of ISO 26000.

In 2017, there are a total of 800 stakeholders in the construction industry (related shareholder, employees, customers, local communities, etc.). The social value of the construction industry selected by each of them is as follows.

Once social value issues are identified on the basis of the importance of stakeholders, it is necessary to prioritize which issues to focus on. Prioritization also requires consistent logic, and according to 'From Transparency to Performance' of the Hauser Center at Harvard University, the method of prioritization is as follows.

- 1) Cut-off test: Select issues that have exceeded a certain point
- 2) Select a specific number of issues per sector (eg, top eight issues)
- 3) Select the top 25% of the issues in each field

Table 1. The results of Materiality test of Social Value in Construc-tion Industry

1 Enhance accountability of the board 0. 2 Strengthen transparency of corporate management 0.	14
2 Strengthen transparency of corporate management 0. 3 Participation of various stakeholder groups 0. Due diligence to identify negative impacts on 0.	14
2 management 0.3 3 Participation of various stakeholder groups 0. 4 Due diligence to identify negative impacts on 0.	14
Due diligence to identify negative impacts on	
	11
Human Hgmo	
5 Human Rights Risk Situation Management 0.	10
6 Complicity and Avoidance 0.0	09
7 Guarantee grievance activity 0.	14
B Discrimination against vulnerable groups (children, women, persons with disabilities, etc.) 0.	11
9 Ensure citizenship and political rights of businesses and local members 0.0	08
Ensure economic, social and cultural rights of business and local members	08
11 Ensure basic rights in work 0.	16
Ensure Fair Employment and Employment Relations 0	29
Responsibility for social protection of the workplace 0.	18
14 Guarantee of social dialogue of workers 0.	18
15 Health and safety in work 0.	18
Provide human development and training opportunities at work 0.0	09
17 Efforts to Prevent Environmental Pollution 0.3	20
18 Efforts to use sustainable resources 0.	17
19 Climate change mitigation efforts 0.	11

20	Environmental protection, biodiversity and natural habitat restoration efforts	0.07
21	Efforts to Prevent Corruption	0.22
22	Responsible political participation	0.11
23	Conduct fair competition	0.21
24	Promote social responsibility of related and partner companies	0.10
25	Respect for property rights (copyright, patent rights)	0.04
26	Fair marketing and contract execution	0.12
27	Efforts to Protect Consumer Health and Safety	0.09
28	Provide product information for sustainable purchasing decisions	0.12
29	Consumer complaints and conflict resolution efforts	0.17
30	Strengthen consumer data and privacy protection	0.10
31	Ensure the use of essential services (electricity, gas, drinking water)	0.06
32	Consumer education for wise and responsible consumption	0.04
33	Participation in community development	0.14
34	Contributing to community education and culture development	0.08
35	Maximize job creation opportunities	0.14
36	Contribution through expertise, application of technology to the community	0.09
37	Efforts to create wealth and income in the community	0.06
38	Efforts to Promote Local Health	0.04
39	Community social investment support efforts	0.04

It is important to harmonize the ease of handling, inclusiveness, and importance between the indicators. In this paper, we selected the social value issues of the construction industry, which are considered important by more than 20% of stakeholders participating in the survey, as the core issues.

Table 2 summarizes the core social value issue of the construction industry. The most important issue is "Strengthen transparency of corporate management", with a significance point of 0.41. Point 0.41 means that 41 out of 100 stakeholders consider it is an important social value issue that companies should manage.

Compared with other industries, for example, 'Consumer data and privacy protection (0.29point)' and 'Consumer complaints and conflict resolution efforts (0.26point)' are important issues in the financial sector. On the other hand, 'Efforts to Prevent Corruption (0.22point)', 'Conduct fair competition (0.21point)', 'Efforts to Prevent Environmental Pollution (0.20point)' are selected as important issues in the construction industry.

Table 2. Key Social Value Issues in the Construction Industry

	Key Social Value issue	Materiality
1	Strengthen transparency of corporate management	0.41
2	Ensure Fair Employment and Employment Relations	0.29
3	Efforts to Prevent Corruption	0.22
4	Conduct fair competition	0.21
5	Efforts to Prevent Environmental Pollution	0.20

(3) Establish key activity indicators by Key Social Value Issues in the Construction Industry

At this stage, daily business activities that can have a significant impact on stakeholders are classified as impact indicators(eg, environmental emissions issues, safety records in the workplace, product quality programs, etc.), and business activities that

change business models to simultaneously implement social values are classified as innovation indicators(eg, entry into alternative energy markets, development of vaccines to prevent infant diseases in developing countries, and provision of mobile phones for urban poor). It is also a step to optimize the indicators by focusing on the construction industry. Especially, when the construction cost of the current building is decided by the material, the area, the land value, etc., a system for establishing the qualitative part is needed. In order to understand the qualitative aspects to be considered in the construction industry, we conducted Materiality test of important social value issues in the construction industry. Based on the GRI guideline activity indicators, we can summarize the following factual business activity indicators on important issues derived as follows.

Table 3. Activity checklist by Key Social value issue

Table 5. Tetrity effectivity by Rey Social value issue				
Activity checklist by Key Social value issue				
1	GRI 102-16: a. A description of the organization's values, principles, standards, and norms of behavior about corporate social responsibility. GRI 102-17: a. A description of internal and external mechanisms for: i. seeking advice about ethical and lawful behavior, and organizational integrity; ii. reporting concerns about unethical or unlawful behavior, and organizational integrity.			
	GRI 102-8: a. Total number of employees by employment contract (permanent and temporary), by gender. b. Total number of employees by employment contract			

- Total number of employees by employment contract (permanent and temporary), by region.
- c. Total number of employees by employment type (full-time and part-time), by gender.
- d. Whether a significant portion of the organization's activities are performed by workers who are not employees. If applicable, a description of the nature and scale of work performed by workers who are not employees.
- e. An explanation of how the data have been compiled, including any assumptions made.

GRI 401-1

2

a. Total number and rate of new employee hires during the reporting period, by age group, gender and region.

b. Total number and rate of employee turnover during the reporting period, by age group, gender and region.

GRI 401-3:

- a. Total number of employees that were entitled to parental leave, by gender.
- b. Total number of employees that took parental leave, by gender.
- c. Total number of employees that returned to work in the reporting period after parental leave ended, by gender.
- d. Total number of employees that returned to work after parental leave ended that was still employed 12 months after their return to work, by gender.
- Return to work and retention rates of employees that took parental leave, by gender.

GRI 205-1:

- a. Total number and percentage of operations assessed for risks related to corruption.
- b. Significant risks related to corruption identified through the risk assessment.

GRI 205-2:

- a. Total number and percentage of governance body members that the organization's anti-corruption policies and procedures have been communicated to, broken down by region.
- Total number and percentage of employees that the organization's anti-corruption policies and procedures have been communicated to, broken down by employee category and region.
- c. Total number and percentage of business partners that the organization's anti-corruption policies and procedures have been communicated to, broken down by type of business partner and region. Describe if the organization's anti-corruption policies and procedures have been communicated to any other persons or organizations.
- d. Total number and percentage of governance body members that have received training on anti-corruption, broken down by region.
- e. Total number and percentage of employees that have received training on anti-corruption, broken down by employee category and region.

GRI 205-3:

3

- a. Total number and nature of confirmed incidents of corruption.
- b. Total number of confirmed incidents in which employees were dismissed or disciplined for corruption.
- c. Total number of confirmed incidents when contracts with business partners were terminated or not renewed due to violations related to corruption.
- d. Public legal cases regarding corruption brought against the organization or its employees during the reporting period and the outcomes of such cases

GRI 103-1:

- a. An explanation of why the topic is material.
- b. The Boundary for the material topic, which includes a description of:
 - i. where the impacts occur;
 - ii. the organization's involvement with the impacts. For example, whether the organization has caused or contributed to the impacts, or is directly linked to the impacts through its business relationships.
- c. Any specific limitation regarding the topic Boundary.

GRI 103-2:

- a. An explanation of how the organization manages the topic.
- b. A statement of the purpose of the management approach.
- c. A description of the following, if the management approach includes that component:
- i. Policies
 - ii. Commitments
 - iii. Goals and targets
 - iv. Responsibilities
 - v. Resources
 - vi. Grievance mechanisms
 - vii. Specific actions, such as processes, projects, programs and initiatives

GRI 103-3:

- a. An explanation of how the organization evaluates the management approach, including:
 - i. the mechanisms for evaluating the effectiveness of the management approach;
 - ii. the results of the evaluation of the management approach;
 - iii. any related adjustments to the management approach.

GRI 206-1

4

- a. Number of legal actions pending or completed during the reporting period regarding anti-competitive behavior and violations of anti-trust and monopoly legislation in which the organization has been identified as a participant.
- Main outcomes of completed legal actions, including any decisions or judgments.

GRI 302-4

- a. Amount of reductions in energy consumption achieved as a direct result of conservation and efficiency initiatives, in joules or multiples.
- b. Types of energy included in the reductions; whether fuel, electricity, heating, cooling, steam, or all.
- Basis for calculating reductions in energy consumption, such as base year or baseline, including the rationale for choosing it.
- d. Standards, methodologies, assumptions, and/or calculation tools used.

GRI 302-5

- a. Reductions in energy requirements of sold products and services achieved during the reporting period, in joules or multiples.
- b. Basis for calculating reductions in energy consumption, such as base year or baseline, including the rationale for choosing it.
- c. Standards, methodologies, assumptions, and/or calculation tools used.

GRI 306-1:

5

- a. Total volume of planned and unplanned water discharges by:
 - i. destination;
 - ii. quality of the water, including treatment method;
 - iii. whether the water was reused by another organization.
 - b. Standards, methodologies, and assumptions used.

GRI 306-2:

- a. Total weight of hazardous waste, with a breakdown by the following disposal methods where applicable:
 - i. Reuse
 - ii. Recycling
 - iii. Composting
 - iv. Recovery, including energy recovery
 - v. Incineration (mass burn)
 - vi. Deep well injection
 - vii. Landfill
 - viii. On-site storage
 - ix. Other (to be specified by the organization)
 - Total weight of non-hazardous waste, with a breakdown by the following disposal methods where applicable:
 - i. Reuse
 - ii. Recycling
 - $iii.\ Composting$
 - iv. Recovery, including energy recovery

- v. Incineration (mass burn)
- vi. Deep well injection
- vii. Landfill
- viii. On-site storage
- ix. Other (to be specified by the organization)
- c. How the waste disposal method has been determined:
 - i. Disposed of directly by the organization, or otherwise directly confirmed
 - ii. Information provided by the waste disposal contractor
 - iii. Organizational defaults of the waste disposal contractor

GRI 306-3

- a. Total number and total volume of recorded significant spills.
- b. The following additional information for each spill that was reported in the organization's financial statements:
 i. Location of spill;
 - ii. Volume of spill;
 - iii. Material of spill, categorized by: oil spills (soil or water surfaces), fuel spills (soil or water surfaces), spills of wastes (soil or water surfaces), spills of chemicals (mostly soil or water surfaces), and other (to be specified by the organization).
- c. Impacts of significant spills.

GRI 306-4:

- a. Total weight for each of the following:
 - i. Hazardous waste transported
 - ii. Hazardous waste imported
 - iii. Hazardous waste exported
 - iv. Hazardous waste treated
- b. Percentage of hazardous waste shipped internationally.
- c. Standards, methodologies, and assumptions used.

GRI 307-1:

- a. Significant fines and non-monetary sanctions for noncompliance with environmental laws and/or regulations in terms of:
 - i. total monetary value of significant fines;
 - ii. total number of non-monetary sanctions;
 - iii. cases brought through dispute resolution mechanisms.
- b. If the organization has not identified any non-compliance with environmental laws and/or regulations, a brief statement of this fact is sufficient.

GRI 308-1:

a. Percentage of new suppliers that were screened using environmental criteria.

(4) Establish How to Measure Checklist

According to the B-impact model in the US, companies are first self-diagnosed based on the industry-specific checklist presented by B-lab. And publicly announces the results of the self-diagnosis and declares no falsifications. Finally, the B-lab verifies the procedure of self-diagnosis of the enterprise. Therefore, the Korea B-impact model of the construction industry should start with the self-assessment of the company based on the activity indicators of the important social value issues selected earlier. In addition, companies should publicly announce that their self-diagnosis is not false, and a CSR (Corporate Social Responsibility) audit organization designated

by the government should verify it with a construction industry expert.

Of course, if possible, it will be clear that third-party construction professionals and CSR specialists have a verification step that directly identifies the company's social value creation performance on the B-impact checklist. In this case, there are limitations that involve a lot of time and cost. However, if the results of this fair and objective social value evaluation are disclosed to the domestic market, it will be able to fully utilize it in the analysis of the reputation and risk of domestic companies in the financial investment industry. This is expected to naturally expand SRI(Socially Responsible Investment) and bring a virtuous circle structure to society.

6. CONCLUSION

While quality management and technology management have led us to a society that emphasizes price-performance and efficiency, social responsibility management lead a society that recognizes companies that produce and sell products and services while considering social values. This helps to create a virtuous cycle economic ecosystem in which companies considering social value are continuously invested and grown and society grows together.

In particular, applying the Korea B-impact model of the construction industry presented in this paper, it is possible to prioritize support for companies that realize social value. This not only improves the competitiveness of the domestic construction industry but also helps improve the quality of life of the people as well as the development of the construction industry. If possible, we recommend that core social value issues in the construction are annually set up by the results stakeholder surveys in the construction sector conducted by the Korean Standards Association (KSA), and also update the activity indicators by key issues. It will be a way to respond to the social value creation direction that the government recently intends to pursue. In addition, it can meet the requirements of foreign buyers who require a level of social responsibility certification for domestic companies operating overseas.

This is because most of the requirements are to report the response of the enterprises and organizations that are derived through stakeholder engagement to environmental and social risks

In the case of the B-impact model of the construction industry presented in this paper, we derive core social value issues from stakeholders (government, consumers, NGOs, local communities, employees, etc.) related to the industry every year. The checklist based on issues and related activity indicators will be a way to respond to the direction of social value creation that the government intends to pursue recently. It is also used as a measure of Socially Responsible Investment (SRI), which conducts screening of socially harmful enterprises and organizations such as labor exploitation, environmental pollution, and conducts selective investment in organizations

that realize social values.

Finally, it will have the effect of increasing the diversity of consumer rights and choices. In particular, this study has developed a B-impact model focusing on the construction sector that can have the most widespread social impacts, and this is expected to be a major basis for building a basic ecosystem for the sustainable development of society.

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