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Title	グローバル生産ネットワークにおける収益慣行の改善に向けた持続可能性プログラムの実施：バングラデシュの視点
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論文題目	Implementing Sustainability Programs toward improving bottom-line practices in the Global Garment Sector: Bangladesh perspective
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論文の内容の要旨

Background of the study Sustainability is a long-debated issue, and there is no universal approach to implement sustainability programs for all organizations. The broad aim of this study is to explore the implementation of sustainability programs (SP) by the lead suppliers improving all bottom lines performances of the labor-intensive global garment sector. The purpose is reached through three research queries. First, what does sustainability mean to the garment suppliers, and how important is sustainability program to consider in the current business practices? Second, what are the key performance indicators to implement sustainability programs by garment suppliers? Furthermore third, how do the workplace compliance pressures mediate to improve suppliers' sustainability programs?

Materials and Method We designed an exploratory case study with multiple cases from the Bangladesh garment sector. The study chose the Bangladeshi garment industry as the study context due to the increased pressures for social and environmental compliances after several workplace occurrences. We selected only three case companies after considering the research aim, data collection protocols, and accessibility to the study setting. The study employed multi-methods of interviews, observations, and document reviews for data collection from the three Bangladeshi apparel manufacturers. We selected the twenty-two respondents through non-probability sampling for interview data collection. The researcher analyzed all interview data through the thematic content analysis technique.

Study Results and discussions The study uncovered three key findings. First, the case companies considered sustainability programs as standardized practices or corporate business policies overcoming the internal and external challenges. These challenges appeared after the stakeholders' pressures since the 2013 Rana Plaza collapse. The internal challenges concerning organizational operational and external forces led case firms to adopt regulatory safety compliance initiatives immediately after the 2013 factory collapse. Second, case firms developed five bottom lines (FBL) capabilities by focusing on the workplace, environmental, social, economic, and governance dimensions. These capabilities help firms tackle organizational and operational challenges facing day-to-day business activities. They developed almost twenty-three key performance indicators

(KPIs) under the FBL capabilities. Although there were many differences among the KPIs, they set them as visible measures to scale their SPs. Third, workplace compliance was underpinned as the initial effort that mediated the SPs through several phases. They addressed factories' safety issues and set initiatives to remediate them. Second, they extended the programs that contribute to societal and environmental practices, and finally, they combined SPs to continue the changes for creating new business scopes.

To firm A, workplace safety, occupational health, and cleaner production assessment are the three key initiatives to embrace sustainability practices. These initiatives became very visible and measurable toward improving bottom-line performance. On the other hand, firm B emphasized transforming human capital through ensuring workers' human rights, labor codes practices, empowerment, skilled training, and other volunteering activities alongside workplace safety and occupational health. However, this firm also addressed the ecological impacts, process wastes, and resources barriers to expedite environmental assessment, offset the carbon emissions, and develop resource management. However, case firm C is more structured in sustainability orientation than the other two firms. They adopted legal compliance, ethical business practices, and environmental footprint management toward their sustainability journey. The global business norms such as United Nation Global Compact (UNGP) and Global Reporting Initiative (GRI) are two parameters to set their standards in the bottom-line performances. The top management considers employees' health, workplace safety, empowerment, social sponsorships, decarbonization, green infrastructure, etc., as strategic initiatives to lead garment export business in the competitive edge.

All three firms differentiated among them, deeming their corporate strategies, policy-making, and KPIs practices. Their corporate statement showed how to embody sustainability through their business activities. Each firm set a vision to be the most regarded company by offering quality products and the best manufacturing services with less social and environmental costs. The study results revealed that the corporate leaders of all three firms learned triple-bottom-line issues from many national regulations international and global management standards. They combined their knowledge with their internal organizations and converted these into policies and action plans to implement sustainability programs. The study argued that the garment suppliers' sustainability programs should be considered five bottom lines instead of three bottom lines.

Theoretical and practical contributions The study serves two significant purposes, both in academic and practical fields. It also offers several directions and indicators toward improving sustainability practices from five areas.

The study argued that the case firms of the global garment sector integrated knowledge management alongside institutional, resource-based, and stakeholder approaches to create core values, corporate policies, and business practices toward sustainability programs. The study found that the firms accepted global climate issues and societal impacts as core to rethink with the business activities. Therefore, they combined those concerns with core business activities to set the sustainability programs in operational and organizational practices. The corporate team of all three companies socializes with different knowledge partners, auditors, and international organizations to understand business norms and standards toward sustainability practices. The management employees became more scope to receive outside knowledge on implementing policies, standards, and indices over safe, healthy, and green work environment toward sustainability programs.

The study results have a high impact considering practical implications. The study identified a set of key performance indicators (KPIs) with hundreds of the above measures. These indicators help the small and medium garment suppliers incorporate the SP in their operating model. The managers of direct garment exporters in the GGS can use the specific measures to scale their facilities' performance concerning bottom lines. Again, the manufacturers who fell in the indirect sourcing model also use the KPIs of this study to promote sustainability practices within their facilities. To implement SP, the Bangladesh garment sector needs to carefully align its economic contributions with its long-term workplace safety, social security, environmental accountability, and corporate governance. In this light, the study results provide the hundreds above practical measures under twenty-third KPIs for enhancing the five bottom lines practices of the garment suppliers.

Originality of this study The study identified the garment suppliers' sustainability program (SSP) through a case study research strategy to promote the bottom-line practices in the GGS context. Many business frameworks have been illustrated in the prior literature that is overgeneralized, including macro views, and challenging to translate into practice garment sector context. Therefore, the context-specific framework on SSP became craving need to be explored. This study aimed to explore such framework from lead suppliers' sustainability practice for the whole garment sector on implementing sustainability practices in the complex production network. The study, thus, designed a framework that three factors: independent factors (barriers), motivating factors (drivers), and dependent variables such as KPIs from three case firms toward sustainable business practices.

Limitation and future study The main limitation of this study is to exclude the indirect garment exporters. Due to access limitations, reluctance to share information, and lack of business data, this study did not consider the subcontractor or informal garment sector. However, these limitations invite future studies on greater context, including direct and indirect suppliers in a global production network. Future investigations can also seek the relationship between materiality issues and business performances, excluded here. How much impact on productivity and worker efficiencies after implementing sustainability issues may offer an exciting insight for future research?

Keywords*:* Sustainable development, readymade garment, Textile and Apparel Industry, Workplace Safety, Social Compliance, Ethical Trading, Environmental, Social and Governance, Ecological Footprint.

論文審査の結果の要旨

本博士研究論文は、現代の社会で企業経営に対してもサスティナビリティへの意識が求められる動向にあることを踏まえ、バングラディシュのアパレル産業の実態が、どのような状況に置かれており、また、企業体質を変えていく試みがどのように行われ、どの程度の効果を示しているかについて、根本的な企業構造を探り出し、それを改革するために問いを立てながら追求することで、複雑な問題を解決する糸口を探り出そうとする研究である。

まず、関連する資料の調査を執拗に重ねていくという方法で、バングラディシュの産業構造の主軸を成しているアパレル業界の職場としての在り方、経済の構造上の課題、社会的基盤とその変化、環境という視点での新たな企業課題を多角的に洗い出すことで、具体的な研究目標を設定した。次に、バングラディシュの規範的企業３社に対する聞き取りにより、サスティナビリティの視点が企業経営に影響を

もたらしうるものである可能性を論考した。事例研究としては、インタビューの規模が限定的であるが、社会科学的アプローチでの調査的側面では議論が成立している。文献研究の幅広さとコーディングを適応してまとめあげた過程は評価に値する。一方で、収集したデータを十分に分析しきれているかどうかという問題が残るが、これについては今後、本研究で得られた仮説を検証する目的で研究を継続する過程で活かされていく見込みがあると判断した。予備審査時点で論考の不明瞭さを指摘され、改善を何度も重ねてきた経緯があり、完成度が非常に高いとは言えないものの、博士論文としての全体的な構成が整うに至っている。

環境保全という大きな社会課題に対して、個々の研究者が取り組めることを本研究において実行したことは意義あることであり、事例研究としての学術的な価値も認められる。企業経営という実社会的な問題において、サスティナビリティに対する意識がプラスに働くという知見は、特にアパレル産業、及び、その他の衰退傾向にある主幹産業を抱える諸国で共有されうる、問題解決の手がかりになりうるだろう。諸外国との連携の上で成り立つ我が国の企業においても、参照されるべき環境経営の重要性が示唆されている。

以上、本論文は、バングラディシュのアパレル産業における企業経営の改革についてサスティナビリティの観点を加えて探索的に考究したものであり、学術的に貢献するところが大きい。よって博士（知識科学）の学位論文として十分価値あるものと認めた。