#### 8. REFERENCES

- Abbasi, M., & Nilsson, F. (2012). Themes and challenges in making supply chains environmentally sustainable. *Supply Chain Management: An International Journal*, 17(5), 517–530. https://doi.org/10.1108/13598541211258582
- Abraham, M. R. (2017). SRI LANKA'S GARMENT WORKERS "STAND UP" FOR RIGHTS. Retrieved from https://www.ashoka.org/en/story/sri-lanka's-garment-workers-"stand-"-rights
- Agbonkhese, S. E. (2010). Measuring Environmental and Social Sustainability in the Apparel Supply Chain.
- Ahi, P., & Searcy, C. (2013). A comparative literature analysis of definitions for green and sustainable supply chain management. *Journal of Cleaner Production*, 52, 329–341. https://doi.org/10.1016/j.jclepro.2013.02.018
- Ahi, P., & Searcy, C. (2015a). An analysis of metrics used to measure performance in green and sustainable supply chains. *Journal of Cleaner Production*, 86, 360–377. https://doi.org/10.1016/j.jclepro.2014.08.005
- Ahi, P., & Searcy, C. (2015b). Measuring social issues in sustainable supply chains. *Measuring Business Excellence*, 19(1), 33–45. https://doi.org/10.1108/MBE-11-2014-0041
- Akter, R. (2016). Business Sustainability in Bangladesh: An Analysis of Economic Sustainability in Ready-made Garments Industries. *Journal of Management and Sustainability*, 6(1), 149–162. https://doi.org/10.5539/jms.v6n1p149
- Altmann, M. (2014). Environmentally conscious supply chain design Inaugural Dissertation, (August).
- Amulya Gurtu & Cory Searcy & MY Jaber. (2015). An analysis of keywords used in the literature on green supply chain management. *Management Research Review*, *38*(2), 166–194. https://doi.org/http://dx.doi.org/10.1108/JEIM-07-2014-0077
- Aref A. Hervani Marilyn M. Helms Joseph Sarkis. (2005). Performance measurement for green supply chain management. *Benchmarking: An International Journal*, *12*(4), 330–353. https://doi.org/10.1108/09574090910954864
- Ashby, A., Leat, M., Hudson-Smith, M. (2012). Making connections a review of supply chain management and sustainability literature. *Supply Chain Management: An International Journal*, *17*(5), 497–516. https://doi.org/10.1108/13598541211258573
- Azapagic, A., & Perdan, S. (2000). INDICATORS OF SUSTAINABLE DEVELOPMENT FOR INDUSTRY: *Trans IChemE*, 78(July), 243–261.
- Becker, J. M., Klein, K., & Wetzels, M. (2012). Hierarchical Latent Variable Models in PLS-SEM: Guidelines for Using Reflective-Formative Type Models. *Long*

- Range Planning, 45(5–6), 359–394. https://doi.org/10.1016/j.lrp.2012.10.001
- Benoit-Norris, C., Cavan, D. A., & Norris, G. (2012). Identifying social impacts in product supply chains: Overview and application of the social hotspot database. *Sustainability*, *4*(9), 1946–1965. https://doi.org/10.3390/su4091946
- Bernstein, J. (2018). Good Information Is Out There If You Want It. Retrieved from https://www.bloomberg.com/view/articles/2018-01-04/good-information-is-out-there-if-you-want-it
- Blowfield, M. (2003). Ethical Supply Chains in the Cocoa, Coffee and Tea Industries, 15–24.
- Brandix. (2011). Reach 2011.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychol- ogy. Qualitative. *Qualitative Research in Psychology*, *3*(2), 77–101.
- Cambridge. (2017). Cambridge Dictionary. Retrieved from https://dictionary.cambridge.org/dictionary/english/data-collection
- Cambridge Dictionary. (2017).
- Campbell, J. L. (2007). Why Would Corporations Behave in Socially Responsible Ways? an Institutional Theory of Corporate Social Responsibility. *Academy of Management Review*, 32(3), 946–967. https://doi.org/10.5465/AMR.2007.25275684
- Carter, C. R., & Easton, L. L. (2008). International Journal of Physical Distribution & Logistics Management Article information:
- Carter, C. R., & Easton, P. L. (2011). Article information:
- Carter, C. R., & Liane Easton, P. (2011). Sustainable supply chain management: evolution and future directions. *International Journal of Physical Distribution & Logistics Management*, 41(1), 46–62. https://doi.org/10.1108/09600031111101420
- Carter, C. R., & Rogers, D. S. (2008). A framework of sustainable supply chain management: moving toward new theory. *International Journal of Physical Distribution and Logistics Management*, 38(5), 360–387. https://doi.org/10.1108/09600030810882816
- Carter, C. R., & Rogers, D. S. (2013). A framework of sustainable supply chain management: moving toward new theory.

  Http://Dx.Doi.Org/10.1108/09600030810882816.

  https://doi.org/10.1108/09600030810882816
- Chardine-baumann, E., & Botta-genoulaz, V. (2014). A framework for sustainable performance assessment of supply chain management practices. *COMPUTERS & INDUSTRIAL ENGINEERING*, 76, 138–147. https://doi.org/10.1016/j.cie.2014.07.029

- Chaudhry, H., & Hodge, G. (2012). Postponement and supply chain structure: cases from the textile and apparel industry. *Journal of Fashion Marketing and Management*, *16*(1), 64–80. Retrieved from http://www.emeraldinsight.com/10.1108/13612021211203032
- Chin, W. (1998). Issues and Opinion on Structural Equation Modelling. *Manag Inf Syst Q*, 22(1), 7–16.
- Clarke, V., & Braun, V. (2013). Teaching thematic analysis: Overcoming challenges and developing strategies for effective learning. *The Psychologist*, 26(2), 120–123.
- Claudia Colicchia, Marco Melacini, S. P. (2011). Benchmarking supply chain sustainability: insights from a field study. *Benchmarking: An International Journal*, 18(5), 705–732. https://doi.org/http://dx.doi.org/10.1108/BIJ-10-2012-0068
- Closs, D. J., Speier, C., & Meacham, N. (2011). Sustainability to support end-to-end value chains: the role of supply chain management. *J. of the Acad. Mark. Sci.*, 101–116. https://doi.org/10.1007/s11747-010-0207-4
- Coppola, G., Bandinelli, R., Ciarapica, F. E., Dotti, S., Gaiardelli, P., & Resta, B. (2014). Building sustainable supply chains in the Textile, Clothing and Leather Sectors, 52–57.
- Craig R., Carter, P., & Easton, L. (2011). Sustainable supply chain management: evolution and future directions. *International Journal of Physical Distribution & Logistics Management*, 41(1), 46–62.
- Creswell, J. W. (2009). Research design qualitative, quantitative and mixed methods approaches.
- Cutter, A., Osborn, D., Romano, J., & Ullah, F. (2015). Sustainable Development Goals and integration: Achieving a better balance between the economic, social and environmental dimensions. Un.
- Dabija, D.-C., Pop, N. A., & Postelnicu, C. (2016). Ethics of the garment retail within the context of globalization and sustainable development. *Industria Textila*, 67(4), 270–279.
- Daily Mirror. (2017). Sri Lanka becomes more corrupt. *Daily Mirror*. Retrieved from http://www.dailymirror.lk/article/Sri-Lanka-becomes-more-corrupt-122724.html
- Daily News. (2016a). Empowering Sri Lanka's business women in SME sector. *Daily News*. Retrieved from http://dailynews.lk/2016/09/14/business/93087
- Daily News. (2016b). Sri Lanka 5th on list of Most Generous Countries. *Daily News*. Retrieved from http://www.dailynews.lk/2016/10/27/local/97241
- Diabat, A., Kannan, D., & Mathiyazhagan, K. (2014). Analysis of enablers for implementation of sustainable supply chain management A textile case. *Journal of Cleaner Production*, 83, 391–403.

- https://doi.org/10.1016/j.jclepro.2014.06.081
- Dicicco-bloom, B., & Crabtree, B. F. (2006). making sense of qualitative research The qualitative research interview, 314–321. https://doi.org/10.1111/j.1365-2929.2006.02418.x
- Dissanayake, D., Tilt, C., & Xydias-lobo, M. (2016). Sustainability reporting by publicly listed companies in Sri Lanka. *Journal of Cleaner Production*, 129, 169–182. https://doi.org/10.1016/j.jclepro.2016.04.086
- Doane, D., & MacGillivray, A. (2001). Economic sustainability: The business of staying in business. *New Economics Foundation*, (March), 1–52.
- Dubey, R., Gunasekaran, A., Papadopoulos, T., Childe, S. J., Shibin, K. T., & Wamba, S. F. (2016). Sustainable supply chain management: framework and further research directions. *Journal of Cleaner Production*. https://doi.org/10.1016/j.jclepro.2016.03.117
- Egels-Zandén, N., & Lindholm, H. (2015). Do codes of conduct improve worker rights in supply chains? A study of Fair Wear Foundation. *Journal of Cleaner Production*, 107, 31–40. https://doi.org/10.1016/j.jclepro.2014.08.096
- Elkington, J. (1998). Partnerships from cannibals with forks: the triple bottom line of 21st century business. *Environmental Quality Management*, 8(1), 37–51.
- Elkington, J. (2004). Enter the triple bottom line. In *The Triple Bottom Line: Does it All Add Up? Assessing the Sustainability of Business and CSR* (pp. 1–16).
- Embuldeniya, A. (2015). Impact of Apparel Industry on the Economy of Sri Lanka, 1–14.
- Eneko Igartua. (2014). *Blurring boundaries*. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=28139955&l ang=pt-br&site=ehost-live
- European Commision. (2011). IMPORTANCE OF INDUSTRY'S R&D CONTRIBUTION TO SUSTAINABILITY. Retrieved from https://ec.europa.eu/environment/ecoap/about-eco-innovation/research-developments/eu/427\_en
- F. Hair Jr, J., Sarstedt, M., Hopkins, L., & G. Kuppelwieser, V. (2014). *Partial least squares structural equation modeling (PLS-SEM)*. *European Business Review* (Vol. 26). https://doi.org/10.1108/EBR-10-2013-0128
- Fahimnia, B., Sarkis, J., & Davarzani, H. (2015). Green supply chain management: A review and bibliometric analysis. *International Journal of Production Economics*, 162, 101–114. https://doi.org/10.1016/j.ijpe.2015.01.003
- Fashion Revolution. (2017). Fashion Revolution.
- Feng, S., Li, L. X., Duan, Z. G., & Zhang, J. L. (2007). Assessing the impacts of South-to-North Water Transfer Project with decision support systems. *Decision Support Systems*, 42(4), 1989–2003. https://doi.org/10.1016/j.dss.2004.11.004

- Freise, M., & Seuring, S. (2015). Social and environmental risk management in supply chains: a survey in the clothing industry. *Logistics Research*, 8(1), 1–12. https://doi.org/10.1007/s12159-015-0121-8
- Gardetti, M. A., & Subramanian, S. M. (2015). *Handbook of Sustainable Luxury Textiles and Fashion* (Vol. 1).
- Gil-aluja, J., Terceño-gómez, A., & Ferrer-comalat, J. C. (2015). Advances in Intelligent Systems and Computing 377 Scientific Methods for the Treatment of Uncertainty in Social Sciences.
- Gill, P., Stewart, K., Treasure, E., & Chadwick, B. (2008). Methods of data collection in qualitative research: interviews and focus groups. BRITISH DENTAL JOURNAL VOLUME, 204(6), 291–295. https://doi.org/10.1038/bdj.2008.192
- Global Reporting Initiative. (2014). G4 Sustainability Reporting Guidelines. *Global Reporting Initiative*, 1–97. https://doi.org/10.1590/S0101-60832006000700003
- Global Reporting Initiative. (2016). Gri 203: indirect economic impacts 2016 203. *GRI Standards*. Retrieved from www.globalreporting.org
- Gopalakrishnan, K., Yusuf, Y. Y., Musa, A., Abubakar, T., & Ambursa, H. M. (2012). Sustainable supply chain management: A case study of British Aerospace (BAe) Systems. *International Journal of Production Economics*, *140*(1), 193–203. https://doi.org/10.1016/j.ijpe.2012.01.003
- Göran Svensson. (2014). Aspects of sustainable supply chain management (SSCM): conceptual framework and empirical example. https://doi.org/10.1108/13598540710759781
- Govindan, K., Seuring, S., Zhu, Q., & Azevedo, S. G. (2016). Accelerating the transition towards sustainability dynamics into supply chain relationship management and governance structures. *Journal of Cleaner Production*, 112(September), 1813–1823. https://doi.org/10.1016/j.jclepro.2015.11.084
- Goworek, H. (2011). Social and environmental sustainability in the clothing industry: a case study of a fair trade retailer. *Social Responsibility Journal*, 7(1), 74–86. https://doi.org/10.1108/174711111111114558
- GRI. (2013). Sustainability topics for sectors: What do stakeholders want to know? *Sustainability Topics for Sectors*, 156.
- GRI, UN Global Compact, & WBCSD. (2015). SDG Compass. Retrieved from https://sdgcompass.org/business-indicators/
- Gurusinghe, G. (2012). Industry Capability Report, 1–8.
- Ha-Brookshire, J. E., & Hawley, J. (2014). Trends of Research Published by Clothing and Textiles Research Journal (1993-2012) and Outlook for Future Research. *Clothing and Textiles Research Journal*, *32*(4), 251–265. https://doi.org/10.1177/0887302X14541543

- Hair, J. F., Hopkins, L., Sarstedt, M., & Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM) An emerging tool in business research. *European Business Review*, 26(2), 106–121. https://doi.org/10.1108/EBR-10-2013-0128
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a Silver Bullet PLS-. *Journal of Marketing Theory and Practice*, *19*(2), 139–152. https://doi.org/10.2753/MTP1069-6679190202
- Hair, J. F., Sarstedt, M., Ringle, C. M., & Gudergan, S. P. (2017). Advanced Issues in Partial Least Squares Structural Equation Modeling.
- Hami, N., Razali, M., & Ebrahim, Z. (2016). The Impact of Sustainable Manufacturing Practices and Innovation Performance on Economic Sustainability. In *12th Global Conference on Sustainable Manufacturing* (pp. 190–195). https://doi.org/10.1016/j.procir.2014.07.167
- Hansen, E. G., & Schaltegger, S. (2013). 100 per cent organic? A sustainable entrepreneurship perspective on the diffusion of organic clothing. *Corporate Governance*, *13*(5), 583–598. https://doi.org/10.1108/CG-06-2013-0074
- Hansen, U., & Schrader, U. (2005). Corporate Social Responsibility als aktuelles Thema der Betriebswirtschaftslehre. *Die Betriebswirtschaft*, 65(4), 373–395.
- Hartman, C. L., Hofman, P. S., & Stafford, E. R. (1999). PARTNERSHIPS: A PATH TO SUSTAINABILITY. *Business Strategy and the Environment*, 8, 255–266.
- Henriques, A., & Richardson, J. (2004). *The Triple Bottom Line: Does it All Add Up?*
- Hiller Connell, K., & Kozar, J. (2012). Sustainability knowledge and behaviors of apparel and textile undergraduates. *International Journal of Sustainability in Higher Education*, *13*(4), 394–407. https://doi.org/10.1108/14676371211262335
- Huq, F. A., Stevenson, M., & Zorzini, M. (2014). Social sustainability in developing country suppliers: An exploratory study in the ready made garments industry of Bangladesh. *International Journal of Operations & Production Management*, 34(5), 610–638. https://doi.org/10.1108/IJOPM-10-2012-0467
- Hutchins, M. J., & Sutherland, J. W. (2008). An exploration of measures of social sustainability and their application to supply chain decisions. *Journal of Cleaner Production*, *16*(15), 1688–1698. https://doi.org/10.1016/j.jclepro.2008.06.001
- ISM. (2012). ISM Principles of Sustainability and Social Responsibility.
- Jakhar, S. K. (2015a). Performance evaluation and a flow allocation decision model for a sustainable supply chain of an apparel industry. *Journal of Cleaner Production*, 87(1), 391–413. https://doi.org/10.1016/j.jclepro.2014.09.089
- Jakhar, S. K. (2015b). Performance evaluation and a flow allocation decision model for a sustainable supply chain of an apparel industry. *Journal of Cleaner*

- Production, 87(1), 391–413. https://doi.org/10.1016/j.jclepro.2014.09.089
- Jamshed, S. (2014). Qualitative research method-interviewing and observation. *Journal of Basic and Clinical Pharmacy*, 5(4), 87. https://doi.org/10.4103/0976-0105.141942
- Johnson, B., & Turner, L. A. (2003). Data Collection Strategies in Mixed Methods Research. In *Handbook of Mixed Methods in Social & Behavioral Research* (p. 768).
- Joint Apparel Association Forum Sri Lanka. (2009). Garments Without Guilt.
- Joseph F Hair, J., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2014). *A Primer on Partial least squares structural equation modeling (PLS-SEM)*. *SAGE* (Vol. 26). https://doi.org/10.1108/EBR-10-2013-0128
- Joung, C. B., Carrell, J., Sarkar, P., & Feng, S. C. (2012). Categorization of indicators for sustainable manufacturing. *Ecological Indicators*, *24*, 148–157. https://doi.org/10.1016/j.ecolind.2012.05.030
- Kale, S. (2016). The Women Who Make H&M's Clothes Are Fired For Getting Pregnant. Retrieved from https://broadly.vice.com/en\_us/article/bmw993/women-making-hm-clothes-factory-fired-pregnant
- Keating, B., Quazi, A., Kriz, A., & Coltman, T. (2008). Insight from industry In pursuit of a sustainable supply chain: insights from Westpac Banking Corporation, 175–179. https://doi.org/10.1108/13598540810871217
- Kelegama, S. (2009). Ready-made Garment Exports from Sri Lanka. *Journal of Contemporary Asia*, *39*(4), 579–596. https://doi.org/10.1080/00472330903076875
- Khan, N. A. (2009). The Readymade Garments (RMG) Sector of Bangladesh: Exploring Sustainability Dimensions.
- KHENI, N., GIBB, A. G. F. ., & DAINTY, A. R. J. (2010). Health and safety management within SMEs in developing countries: a study of contextual influences. *ASCE Journal of Construction Engineering and Management*, 136(10), 1104–1115. Retrieved from https://dspace.lboro.ac.uk/dspace-jspui/bitstream/2134/7717/1/Kheni-Gibb-Dainty ASCE SMEs in Dev Countries 2010.pdf
- Khurana, K., & Ricchetti, M. (2016). Two decades of sustainable supply chain management in the fashion business, an appraisal. *Journal of Fashion Marketing and Management*, 20(1), 89–104.
- Klassen, R. D., & Vereecke, A. (2012). Social issues in supply chains: Capabilities link responsibility, risk (opportunity), and performance. *International Journal of Production Economics*, *140*(1), 103–115. https://doi.org/10.1016/j.ijpe.2012.01.021
- Köksal, D., Strähle, J., Müller, M., & Freise, M. (2017). Social Sustainable Supply

- Chain Management in the Textile and Apparel Industry—A Literature Review. *Sustainability*, 9(1), 100. https://doi.org/10.3390/su9010100
- Kremer, G. E., Haapala, K., Murat, A., Chinnam, R. B., Kim, K. Y., Monplaisir, L., & Lei, T. (2016). Directions for instilling economic and environmental sustainability across product supply chains. *Journal of Cleaner Production*, *112*, 2066–2078. https://doi.org/10.1016/j.jclepro.2015.07.076
- Kuei, C. H., Madu, C. N., Chow, W. S., & Chen, Y. (2015). Determinants and associated performance improvement of green supply chain management in China. *Journal of Cleaner Production*, *95*, 163–173. https://doi.org/10.1016/j.jclepro.2015.02.030
- Kumar, S., & Arbi, a. S. (2007). Outsourcing strategies for apparel manufacture: a case study. *Journal of Manufacturing Technology Management*, 19(1), 73–91. https://doi.org/10.1108/17410380810843462
- Laari, S., Toyli, J., Solakivi, T., & Ojala, L. (2016). Firm performance and customerdriven green supply chain management. *Journal of Cleaner Production*, *112*, 1960–1970. https://doi.org/10.1016/j.jclepro.2015.06.150
- Labuschagne, C., Brent, A. C., & Van Erck, R. P. G. (2005). Assessing the sustainability performances of industries. *Journal of Cleaner Production*, *13*(4), 373–385. https://doi.org/10.1016/j.jclepro.2003.10.007
- Lam, J. K. C., & Postle, R. (2006). Textile and apparel supply chain management in Hong Kong. *International Journal of Clothing Science and Technology*, 18(4), 265–277. https://doi.org/10.1108/09556220610668491
- Lanka, S., & Development, E. (2014). INDUSTRY CAPABILITY REPORT.
- Lee, K. L., Udin, Z. M., & Hassan, M. G. (2014). Global Supply Chain Capabilities in Malaysian Textile and Apparel Industry. *International Journal of Supply Chain Management*, *3*(2), 31–40. https://doi.org/10.11648/j.ijber.s.2014030601.13
- Linton, J. D., Klassen, R., & Jayaraman, V. (2007). Sustainable supply chains: An introduction. *Journal of Operations Management*, 25(6), 1075–1082. https://doi.org/10.1016/j.jom.2007.01.012
- Lopez-Acevedo, G., & Robertson, R. (2016). Stitches to Riches? DIRECTIONS IN DEVELOPMENT Poverty, The World Bank. https://doi.org/10.1596/978-1-4648-0813-5
- Lunsford, T. R., & Brenda Rae Lunsford. (1995). The Research Sample, Part 1:Sampling. *Journal of Prosthetics Adn Orthotics*, 7(3), 105–112.
- Luthra, S., Garg, D., & Haleem, A. (2014). Green supply chain management: Implementation and performance a literature review and some issues. *Journal of Advances in Management Research*, 11(1), 20–46. https://doi.org/10.1108/JAMR-07-2012-0027
- Luthra, S., Garg, D., & Haleem, A. (2016). The impacts of critical success factors for

- implementing green supply chain management towards sustainability: An empirical investigation of Indian automobile industry. *Journal of Cleaner Production*, 121, 142–158. https://doi.org/10.1016/j.jclepro.2016.01.095
- Madurawala, S. (2014). What women do and what women can do: Entrepreneurship and gender equality in Sri Lanka. *The Island Online Edition*. Retrieved from http://www.island.lk/index.php?page\_cat=article-details&page=article-details&code\_title=99484
- Madurawala, S. (2017, April). Dwindling stitching hands Labour shortages in apparel industry in Sri Lanka. *Daily Mirror*.
- Mani, V., Agrawal, R., & Sharma, V. (2014). Supplier selection using social sustainability: AHP based approach in India. *International Strategic Management Review*, 2(2), 98–112. https://doi.org/10.1016/j.ism.2014.10.003
- Mani, V., Agrawal, R., & Sharma, V. (2015). Social sustainability in the supply chain: analysis of enablers. *Management Research Review*, *38*(9), 1016–1042. https://doi.org/http://dx.doi.org/10.1108/JEIM-07-2014-0077
- Mani, V., Agrawal, R., & Sharma, V. (2015). Supply Chain Social Sustainability: A Comparative Case Analysis in Indian Manufacturing Industries. *Procedia - Social and Behavioral Sciences*, 189, 234–251. https://doi.org/10.1016/j.sbspro.2015.03.219
- Mani, V., Agrawal, R., & Sharma, V. (2016). Impediments to Social Sustainability Adoption in the Supply Chain: An ISM and MICMAC Analysis in Indian Manufacturing Industries. *Global Journal of Flexible Systems Management*, 17(2), 135–156. https://doi.org/10.1007/s40171-015-0106-0
- Mani, V., Gunasekaran, A., Papadopoulos, T., Hazen, B., & Dubey, R. (2016a). Supply chain social sustainability for developing nations: Evidence from India. *Resources, Conservation and Recycling*, 111, 42–52. https://doi.org/10.1016/j.resconrec.2016.04.003
- Mani, V., Gunasekaran, A., Papadopoulos, T., Hazen, B., & Dubey, R. (2016b). Supply chain social sustainability for developing nations: Evidence from india. *Resources, Conservation and Recycling*, 111(August), 42–52. https://doi.org/10.1016/j.resconrec.2016.04.003
- Mani, V., Gunasekaran, A., Papadopoulos, T., Hazen, B., & Dubey, R. (2016c). Supply chain social sustainability for developing nations: Evidence from india. *Resources, Conservation and Recycling*, 111(June), 42–52. https://doi.org/10.1016/j.resconrec.2016.04.003
- Marc Winter A. Michael Knemeyer. (2013). Exploring the integration of sustainability and supply chain management: Current state and opportunities for future inquiry. *International Journal of Physical Distribution & Logistics Management*, 43(1), 18–38.
- Marc Winter A. Michael Knemeyer. (2014). Article information: *International Journal of Physical Distribution & Logistics Management*, 35(2008), 441–458.

- https://doi.org/http://dx.doi.org/10.1108/BIJ-10-2012-0068
- Mathiyazhagan, K., Diabat, A., Al-Refaie, A., & Xu, L. (2015). Application of analytical hierarchy process to evaluate pressures to implement green supply chain management. *Journal of Cleaner Production*, 107, 229–236. https://doi.org/10.1016/j.jclepro.2015.04.110
- McArthur, J. W. (2014). The Origins of the Millennium Development Goals. *SAIS Review*, *XXXIV*(2), 5–24. https://doi.org/10.1353/sais.2014.0033
- McClelland, J. (2017). Ethical issues remain in the fashion industry. Retrieved from https://www.raconteur.net/business/ethical-issues-remain-in-the-fashion-industry
- Md. Mohiuddin. (2014). Labor Management Relations Following the Labor Laws of Ready Made Garments in Bangladesh: The Present Perspective.\n. *IOSR Journal of Business and Management (IOSR-JBM)*, 16(3), 32–36.
- Milano, P. D. I. (2014). Multi-objective Optimization for Sustainable Supply Chain Network Design, 2013–2014.
- Min, H., & Kim, I. (2012). Green supply chain research: Past, present, and future. *Logistics Research*, 4(1–2), 39–47. https://doi.org/10.1007/s12159-012-0071-3
- Morgan, A. (2015). True Cost.
- Moulds, J. (2017). Child labour in the fashion supply chain Where, why and what can be done. Retrieved from https://labs.theguardian.com/unicef-child-labour/
- Narayanamurthy, G., & John, L. (2015). Converging sustainability definitions: industry independent dimensions. *World Review of Science Technology and Sustainable Development*, 12(3), 206–232. https://doi.org/10.1108/WJSTSD-04-2015-0017
- Novick, G. (2008). Is There a Bias Against Telephone Interviews In Qualitative Research? *NIH Public Access*, *31*(4), 391–398. https://doi.org/10.1002/nur.20259.Is
- Nurul, W., Wan, K., Brito, M. P. De, & Tavasszy, L. A. (2016). Sustainable supply chain management in the oil and gas industry: A review of corporate sustainability reporting practices. *Benchmarking: An International Journal*, 23(6), 1423–1444. https://doi.org/10.1108/BIJ-08-2013-0088
- Obokoh, L. O., & Goldman, G. (2016). Infrastructure deficiency and the performance of small- and medium-sized enterprises in Nigeria's Liberalised Economy. *Acta Commercii*, 16(1), a339. https://doi.org/http://dx.doi.org/10.4102/ac.v16i1.339
- Pachouri, A., & Sharma, S. (2016). Barriers to innovation in Indian small and medium scale enterprises. ADBI Working Paper Series.
- Palme, U. (2011). Social aspects in work towards sustainable supply chains. *Tosca-Life.Info*, (2011-04-04), 15. Retrieved from http://www.tosca-

- life.info/wordpress/wp-content/uploads/2011/05/Report-on-Social-aspects-in-work-towards-sustainable-supply-chains-v110404.pdf
- Pansiri, J., & Temtime, Z. T. (2008). Assessing managerial skills in SMEs for capacity building. *Accounting, Auditing & Accountability Journal*, 27(2), 251–260. https://doi.org/10.1108/MBE-09-2016-0047
- Patton, M. Q. (2002). Qualitative research and evaluation methods.
- Perera, K. (2014). Food poisoning in factories: Are we ignoring the larger picture? *The Sunday Times*.
- Piecyk, M. I., & Björklund, M. (2015). Logistics Service Providers and Corporate Social Responsibility Sustainability reporting in the logistics industry. *International Journal of Physical Distribution & Logistics Management*, *45*(5), 459–485. https://doi.org/http://dx.doi.org/10.1108/IJPDLM-08-2013-0228
- Rajak, S., & Vinodh, S. (2015). Application of fuzzy logic for social sustainability performance evaluation: A case study of an Indian automotive component manufacturing organization. *Journal of Cleaner Production*, *108*, 1–9. https://doi.org/10.1016/j.jclepro.2015.05.070
- Rakesh Kumar Malviya, & Kant, R. (2015). Article information: *Benchmarking: An International Journal*, 22(7), 1360–1394.
- Rao, P., & Holt, D. (2000). Do green supply chains lead to competitiveness and economic performance? https://doi.org/10.1108/01443570510613956
- Rao, P., & Holt, D. (2005). Do green supply chains lead to competitiveness and economic performance? *International Journal of Operations & Production Management*, 25(9), 898–916. https://doi.org/10.1108/01443570510613956
- RATNASINGHAM, A. (2015). Sri Lanka needs a stronger female work force: Economist.
- Reefke, H., & Mattia, T. (2013). Balanced scorecard for sustainable supply chains: design and development guidelines. *International Journal of Productivity and Performance Management*, 62(8), 805–826. https://doi.org/http://dx.doi.org/10.1108/09564230910978511
- Reuters in Dhaka. (2016). Rana Plaza collapse: 38 charged with murder over garment factory disaster. *The Guardian*. Retrieved from https://www.theguardian.com/world/2016/jul/18/rana-plaza-collapse-murder-charges-garment-factory
- Roca, L. C., & Searcy, C. (2012). An analysis of indicators disclosed in corporate sustainability reports. *Journal of Cleaner Production*, 20(1), 103–118. https://doi.org/10.1016/j.jclepro.2011.08.002
- Roos, S., Zamani, B., Sandin, G., Peters, G. M., & Svanstr??m, M. (2016). A life cycle assessment (LCA)-based approach to guiding an industry sector towards sustainability: the case of the Swedish apparel sector. *Journal of Cleaner Production*, 133, 691–700. https://doi.org/10.1016/j.jclepro.2016.05.146

- Ruwanpura, K. N. (2014). Metal free factories: Straddling worker rights and consumer safety? *Geoforum*, *51*, 224–232. https://doi.org/10.1016/j.geoforum.2013.06.006
- Ruwanpura, K. N., & Wrigley, N. (2011). The costs of compliance? Views of Sri Lankan apparel manufacturers in times of global economic crisis. *Journal of Economic Geography*, 11(6), 1031–1049. https://doi.org/10.1093/jeg/lbq036
- Ryan, G. W., Bernard, H. R., Ryan, G. W., & Bernard, H. R. (2003). Techniques to Identify Themes. *Field Methods*, *15*, 85–109. https://doi.org/10.1177/1525822X02239569
- Sadaat Ali Yawar & Stefan Seuring. (2015). Management of Social Issues in Supply Chains: A Literature Review Exploring Social Issues, Actions and Performance Outcomes. *Journal of Business Ethics*, (JUNE), 12. https://doi.org/10.1007/s10551-015-2719-9
- Salmon, C. (2005). Child Labor in Bangladesh Are Children the Last Economic Resource of the Household? *Journal of Developing Societies*, 21(1–2), 33–54. https://doi.org/https://doi.org/10.1177/0169796X05053066
- Sancha, C., Gimenez, C., & Sierra, V. (2016). Achieving a socially responsible supply chain through assessment and collaboration. *Journal of Cleaner Production*, *112*, 1934–1947. https://doi.org/10.1016/j.jclepro.2015.04.137
- Sarkis, J. (2012). A boundaries and flows perspective of green supply chain management. *Supply Chain Management: An International Journal*, 17(2), 202–216. https://doi.org/10.1108/13598541211212924
- Sarkis, J., Helms, M. M., & Hervani, A. A. (2010). Reverse logistics and social sustainability. *Corporate Social Responsibility and Environmental Management*, 17(6), 337–354. https://doi.org/10.1002/csr.220
- Sarstedt, M., Ringle, C. M., Smith, D., Reams, R., & Hair, J. F. (2014). Partial least squares structural equation modeling (PLS-SEM): A useful tool for family business researchers. *Journal of Family Business Strategy*, *5*(1), 105–115. https://doi.org/10.1016/j.jfbs.2014.01.002
- Şen, A. (2008). The US fashion industry: A supply chain review. *International Journal of Production Economics*, 114(2), 571–593.
- Servaes, J. (2017). Sustainable Development Goals in the Asian Context.
- Seuring, S. (2013). A review of modeling approaches for sustainable supply chain management. *Decision Support Systems*, *54*(4), 1513–1520. https://doi.org/10.1016/j.dss.2012.05.053
- Seuring, S., & Muller, M. (2008). From a literature review to a conceptual framework for sustainable supply chain management. *Journal of Cleaner Production*, 16(15), 1699–1710. https://doi.org/10.1016/j.jclepro.2008.04.020
- Silvestre, B. S. (2015). A hard nut to crack! Implementing supply chain sustainability in an emerging economy. *Journal of Cleaner Production*, *96*, 171–181.

- https://doi.org/10.1016/j.jclepro.2014.01.009
- Srinivas Nowduri. (2014). Management Information Systems Research for Small and Medium Enterprises: A Sustainability Perspective, 8(8), 201–208.
- Steen, B., & Palander, S. (2016). A selection of safeguard subjects and state indicators for sustainability assessments. *International Journal of Life Cycle Assessment*, 21(6), 861–874. https://doi.org/10.1007/s11367-016-1052-6
- Surendraraj, J. (2017, May). Fashion Revolution Week: Remembering the lives behind the brands. *Mirror*.
- Tajbakhsh, A., & Hassini, E. (2015). Performance measurement of sustainable supply chains: a review and research questions. *International Journal of Productivity and Performance Management*, 64(6), 744–783. https://doi.org/http://dx.doi.org/10.1108/JEIM-07-2014-0077
- Tang, C. S., & Zhou, S. (2012). Research advances in environmentally and socially sustainable operations. *European Journal of Operational Research*, 223(3), 585–594. https://doi.org/10.1016/j.ejor.2012.07.030
- Tate, W. L., Ellram, L. M., & Kirchoff, J. F. (2010). Corporate social responsibility reports: A thematic analysis related to supply chain management. *Journal of Supply Chain Management*, 46(1), 19–44. https://doi.org/10.1111/j.1745-493X.2009.03184.x
- Taticchi, P., Garengo, P., Nudurupati, S. S., Tonelli, F., & Pasqualino, R. (2014). A review of decision-support tools and performance measurement and sustainable supply chain management. *International Journal of Production Research*, 7543(July 2015), 1–22. https://doi.org/10.1080/00207543.2014.939239
- Tay, M. Y., Rahman, A. A., Aziz, Y. A., & Sidek, S. (2015). A Review on Drivers and Barriers towards Sustainable Supply Chain Practices. *International Journal of Social Science and Humanity*, *5*(10), 892–897. https://doi.org/10.7763/IJSSH.2015.V5.575
- Teixerioa, A. A., Jabbour, C. J. C., De Jabbour, A. B. L. D. S., Latan, H., & De Oliveira, J. H. C. (2016). Green training and green supply chain management: evidence from Brazilian fi rms. *Journal of Cleaner Production*, *116*, 170–176. https://doi.org/10.1016/j.jclepro.2015.12.061
- The Island. (2007, October). "Garments without Guilt" on show in Paris "Made in Sri Lanka" synonymous with ethical manufacturing. *The Island Online Edition*.
- Thomassey, S. (2010). Sales forecasts in clothing industry: The key success factor of the supply chain management. *International Journal of Production Economics*, 128(2), 470–483. https://doi.org/10.1016/j.ijpe.2010.07.018
- Touboulic, A., & Walker, H. (2015). Theories in sustainable supply chain management: a structured literature review. *International Journal of Physical Distribution & Logistics Management*, 45(1/2), 16–42. https://doi.org/10.1108/IJPDLM-05-2013-0106

- Turker, D., & Altuntas, C. (2014). Sustainable supply chain management in the fast fashion industry: An analysis of corporate reports. *European Management Journal*, 32(5), 837–849. https://doi.org/10.1016/j.emj.2014.02.001
- UNWCED. (1987). Our Common Future: Report of the World Commission on Environment and Development. International Affairs (Royal Institute of International Affairs 1944-) (Vol. 64). Oxford University Press. https://doi.org/10.2307/2621529
- Varsei, M., Soosay, C., Fahimnia, B., & Sarkis, J. (2014). Framing sustainability performance of supply chains with multidimensional indicators. *Supply Chain Management: An International Journal*, *19*(3), 242–257. https://doi.org/10.1108/SCM-12-2013-0436
- Veleva, V., & Ellenbecker, M. (2001). *Indicators of sustainable production:* Framework and methodology. *Journal of Cleaner Production* (Vol. 9). https://doi.org/10.1016/S0959-6526(01)00010-5
- Wage Indicator. (2017). Women in Leadership Roles.
- Walker, A. T. H. (2015). International Journal of Physical Distribution & Logistics Management Article information:
- Wang, W. (2014). Green supply chain management: A state of the art review. *The 26th Chinese Control and Decision Conference* (2014 CCDC), 3580–3584. https://doi.org/10.1109/CCDC.2014.6852800
- WARNER, J. (2013). What Are the Benefits of Good Occupational Health and Safety Practices? Retrieved from http://blog.readytomanage.com/what-are-the-benefits-of-good-occupational-health-and-safety-practices/
- Weber, M. (2008). The business case for corporate social responsibility: A company-level measurement approach for CSR. *European Management Journal*, 26(4), 247–261. https://doi.org/10.1016/j.emj.2008.01.006
- Wiengarten, F., Pagell, M., & Fynes, B. (2013). ISO 14000 certification and investments in environmental supply chain management practices: Identifying differences in motivation and adoption levels between Western European and North American companies. *Journal of Cleaner Production*, *56*, 18–28. https://doi.org/10.1016/j.jclepro.2012.01.021
- Xiaosong, D., & Lai, F. (2012). Using partial least squares in operations management research: A practical guideline and summary of past research. *Journal of Operations Management*, 30(6), 467–480. https://doi.org/10.1016/j.jom.2012.06.002
- Yawar, S. A., & Seuring, S. (2015a). Management of Social Issues in Supply Chains: A Literature Review Exploring Social Issues, Actions and Performance Outcomes. *Journal of Business Ethics*, (JUNE), 24. https://doi.org/10.1007/s10551-015-2719-9
- Yawar, S. A., & Seuring, S. (2015b). Management of Social Issues in Supply Chains:

- A Literature Review Exploring Social Issues, Actions and Performance Outcomes. *Journal of Business Ethics*, *141*(3), 621–643. https://doi.org/10.1007/s10551-015-2719-9
- Yawar, S. A., & Seuring, S. (2017). Management of Social Issues in Supply Chains: A Literature Review Exploring Social Issues, Actions and Performance Outcomes. *Journal of Business Ethics*, *141*(3), 621–643. https://doi.org/10.1007/s10551-015-2719-9
- Zhihong Wang Joseph Sarkis. (2013). Article information:
- Zhou, F. (2009). Study on the Implementation of Green Supply Chain Management in Textile Enterprises. *Journal of Sustainable Development*, 2(1), p75. https://doi.org/10.5539/jsd.v2n1p75
- Zikmund, W. G. (2003). Research Methods. In *Health Economics Research Method* (pp. 353–354).

## 9. APPENDIX

# 9.1.Appendix 1 - Social Sustainability Practices Benefiting towards Society (SB)

# 9.1.1. Theme 4 - Access to Quality Essential Health Care Services

This theme was addressed by Goal 3 focusing on health. SDG compass pointed out the following sample indicators (GRI et al., 2015).

- "Proportion of workers (m/w) who have access to health services for workrelated accidents or diseases made available or paid for by the Company system"
- "Proportion of workers (m/w) who have access to health services for other personal health issues (not related to or caused by work) made available or paid for by the Company system"
- "If the Company has set up health services for workers, are the services available to family and community members? If yes, how many people have benefited from this service (m/w)"

Healthcare came under the "societal commitment" of the social sustainability dimension of the supply chain (Chardine-baumann & Botta-genoulaz, 2014). Ruwanpura (2014) also addressed the need for healthcare facilities for the workers in the apparel industry. Hence, this theme was considered under the social sustainability dimension. The interviewee #5 further supported this argument.

"In the garment industry, you have to look after the health of the employees. So, you have to make sure enough facilities for that are provided."

The comments of Interviewee #1 further supported this finding by showing how they were providing healthcare facilities to employees along with the expansion of their business;

"We went and set up plants in various areas, what we realized was the health infrastructure and the education infrastructure was very poor in those areas, and the government itself was not doing anything very much to improve that. So, we initiated." Further interviewee #1 explained their actions with examples.

"Breast cancer is a very taboo subject. in Sri Lanka, for women breast cancer is the highest mortalities through cancer. but you know because of the subject matter, especially in rural areas, people do not want to talk about it. So, for us also we started this in 2014 end, and it was very challenging because we had to do promotion with posters in the canteens, people were bit shy in the beginning. But the awareness was created. Then people will come and say "even my mother and her sister had this". So, there was a big dialogue that was created among them. and like for me, the most important thing is that through this program in the last year, how many people have detected Lumos through self-exams and visited hospitals. Actually, two of these people who visited hospitals, they realized that it was cancer, then they because if Brest cancer if you get it in the early stages you can cure it. so now they are undergoing treatments. so, for me through this program, this number of people faced the examinations, 18,500 number is not very important. The fact is that we through this program, we were able to may be save the lives of two of our colleagues, that's the most important."

These interviewee comments catered enough evidence to ensure how apparel manufacturers in Sri Lanka are committed to ensuring the health aspect of its employees and their society.

### 9.1.2. Theme 44 - Health Financing

This theme was associated with Goal 3 and a specific industry of medicine. However, the following indicators can be applied to other industries as well to understand the rationalization behind financing for CSR activities based on the comments of the interviewees. Therefore, the following indicators were taken into consideration (GRI et al., 2015).

- "The company commits to and explains its rationale for investing in health infrastructure-related philanthropic projects (outside of the standard value chain) in the Index countries and their relevance to long-term sustainable access to medicine in Index countries"
- "There is evidence that the company's philanthropic activities (excluding drug donation programs) are aligned with and support implementation of national

health system development plans and stated health priorities in the Index countries."

It was considered under the theme "access to quality essential health care services" when developing the conceptual framework. This justification was further verified through the comment of the interviewee #1.

"So, when somebody gets sick, for instance say in Area A, our plant there has 4500 people. 1% of that get sick means it is a huge number for us. So, based on needs like that we started doing investment in infrastructure in health. Then people used to bring us letters saying, "can you please build our clinic?", "we don't have A/C in our surgery" and so on. So, we started doing that kind of things long before this CSR, sustainability".

Further, this comment reflected that companies are developing health infrastructure not "just because" but with a rationale. Therefore, this intention leads to understanding the real motive behind their social sustainability actions. Hence, this theme was considered under the social sustainability dimension. Moreover, this comment depicted that there is a relationship between health infrastructure and economic gain in return for the company.

### 9.1.3. Theme 11 - Education for Sustainable Development

This theme was classified under the Goal 4 on Education. The example indicators pointed out were; "Measures taken to develop and enhance the highest governance body's collective knowledge of economic, environmental and social topics" and "Number, type and impact of sustainability initiatives designed to raise awareness, share knowledge and impact behavior change, and results achieved" (GRI et al., 2015). As Institute of Supply Management pointed out one of their Sustainability and Social Responsibility Objectives was to "increase supply management professionals' awareness of sustainability and social responsibility" and "educate the supply chain community and others on sustainability and social responsibility subjects" in order to develop the education on sustainability (ISM, 2012, p. 5). Therefore, this theme was considered under the social sustainability dimension leading to the betterment of the society. Further, interviewee #1 added enough evidence on how this theme was

addressed under the social sustainability dimension in the apparel supply chain practically.

"School children planted 7,000 of trees. This amount of grass. They collected so many kilo grams of plastic. When it comes to organic gardening, harvest generated from nutritious cultivation. no pesticides. When we are teaching sustainability in schools, this is some of the activities that we do, students come, and they do by themselves, which is aligned to the SDGs. So, we do these works to raise awareness on sustainable development and to create an active behavioral change in the youth."

#### 9.1.4. Theme 32 - Public Access to Information

This theme belonged to Goal 16. The indicator discussing this theme was "nature and extent of knowledge transfer of best practice, and lessons learned" (GRI et al., 2015).

Individuals getting access to social sustainability information has a similar importance as to environmental information (Khurana & Ricchetti, 2016). Therefore, we considered "public access to information" under the theme "education for sustainability development" because of the awareness developed via information sharing on the best practices done by the companies. Further the interviewee #4 discussed how they report their sustainable practices to the public to make them aware.

"Currently we are doing reporting publicly. But we don't need to do that since we are a private company. But still we do that since we can make a change in the society by even through such a reporting."

This comment depicted that companies are opening to other companies because the world is moving towards an information sharing era. Therefore, good information is no more a secret, it is out there (Bernstein, 2018). As a result, even other companies can implement these practices to make their business operations successful and more sustainable.

# 9.1.5. Theme 88 - Product and Service Information and Labeling

This theme was linked to the Goal 12. "Type of product and service information required by the organization's procedures for product and service information and

labeling, and percentage of significant product and service categories subject to such information requirements" was the sample indicator derived from GRI G4 Sustainability Reporting Guidelines (GRI et al., 2015).

Eco labelling is one such way to share environmental sustainability initiatives with the consumers (Claudia Colicchia, Marco Melacini, 2011; Narayanamurthy & John, 2015; Rakesh Kumar Malviya & Kant, 2015). Labelling is mentioned under supply chain which can also help companies to communicate the codes of conduct to the consumers (Sadaat Ali Yawar & Stefan Seuring, 2015). Further this campaign of "Who Made My Clothes??" in the Fashion Revolution made people aware about the use of the label attached to their clothes and the actual country which have sewn the garment (Fashion Revolution, 2017). Further, the Sri Lankan campaign was conducted by one of the upcycling artists in Sri Lanka (Surendraraj, 2017). The least involvement of big players in the apparel industry depicts they are not that much interested in this kind of awareness programs. Since by sharing product information and labeling the public can be made aware of the sustainability aspect. Therefore, we are considering this theme as a sub theme of 32 on "public access to information".

### 9.1.6. Theme 15 - Youth Employment

This theme was categorized under Goal 8. The sample indicator was "Total number and rates of new employee hires and employee turnover by age group, gender, and region" (GRI et al., 2015).

Giving more employment opportunities to "eligible youth" is important in a socially responsible supply chain (Venkatesh Mani et al., 2016a). Further, Lopez-Acevedo & Robertson (2016) stressed the importance of employing more youth in the high labor intensive apparel industry in South Asia. Therefore, we considered this theme under the social sustainability dimension.

However, in Sri Lankan context there is a difficulty in attracting youth to the apparel industry because of the other lucrative opportunities available in the market such as tourism and retail, for the highly increasing number of educated youth (Madurawala, 2017). With this existing condition, all the interviewees encouraged the idea of giving youth employment for the betterment of the future of the company, where interviewee #1 provided evidence that they are working towards improving the professionalism in

the working culture and giving the proper recognition as a motivation to, especially, the young employees.

"We have repositioned the machine operators. now for us at our company, we don't call the machine operator, machine operator. we call them team members."

Hence, the apparel manufacturers offer a solution to the unemployed youth in the society and cause a social benefit by providing job opportunities to the youth under the improved working environment.

# 9.1.7. Theme 18 - Access to Sexual and Reproductive Health-Care Services

This theme was addressed under Goal 5 on gender equality. The suggested indicator was "Women's access to reproductive health services in surveyed communities. If access for women workers or smallholders is believed to be different, include data" (GRI et al., 2015).

The female workers in apparel manufacturing countries like Cambodia are tending to illegal abortion since their employers are not willing to extend their contracts (Kale, 2016). However, the interviewee #1 discussed the pregnancy issues faced by the women workers in the apparel industries. However, they were discussing about taking care of the health of their employees from a positive view point.

"Pregnancy is related with the young girls in the factories. They are lacking knowledge on sexual health and topics such as birth control and teen pregnancy. So, we are taking steps to educate these employees"

Since this theme investigates the health and sanitation of the employees, this was considered under the health and sanitation of the employees in social sustainability dimension.

# 9.1.8. Theme 5 - Access to WASH (Water, Sanitation and Hygiene)

This theme came under Goal 1 on poverty. And the following were the sample indicators (GRI et al., 2015);

- "Number of employees receiving hygiene training and awareness raising"
- "Number of toilets/urinals provided (on the basis of a rate of 2 toilet seats and 2 urinal facilities per 45 male-workers and 3 toilet seats per 50 females)"

• "Percent of facilities with fully functioning WASH services for all workers"

Ruwanpura (2014) discussed the importance of providing sanitation and hygiene facilities such as "toilet and water-drinking breaks" to the workers in the apparel industry. Providing pure drinking water facilities and necessary number of toilets for the workers are few of the many facilities provided to the workers, when the garment industries moved out from busy town areas to the industrial zones (Akter, 2016). Understanding the impact created on the employees and the society of the company by providing facilities to be hygienic, we considered this theme under the social sustainability dimension.

When conducting the interviews with the responsible personnel in the apparel industry, we learnt that one of the leading apparel manufacturer in Sri Lanka is focusing on "water" as one of their major concerns in the social sustainability dimension. Following comments of the interviewee #2 offered evidence to this argument.

"In social, we take care of our society, as a social responsibility so that we mainly work in our water pillar. And also under CSR we wanted to give safe drinking water for all our employees and the related society"

Further interviewee #3 explained how this theme is a practice in their company.

"Providing drinking water to maintain their health. And we guide them on how to wash their hands."

Proving the condition otherwise, interviewee #6 commented that in a medium sized apparel company, the workers are not getting enough sanitary facilities. Further interviewee mentioned that the toilets are not clean and maintained regularly. However, considering the impact created by this theme on the society, we decided to consider this theme under the social benefits.

#### 9.1.9. Theme 25 - Infrastructure Investments

Goal 7, 9 and 11 discussed this theme. SDG Compass described this theme as "investing in new, resilient infrastructure in developing countries or retrofit existing infrastructure to make it more sustainable" (GRI et al., 2015).

Infrastructure investments happen mainly under Corporate Social Responsibility (CSR) activities with the development of "schools, parks, charities and habitats" (Tate et al., 2010). "Community investments" are done to interact with the community (Roca & Searcy, 2012).

Interviewee #4 provided enough evidence how the apparel companies are changing themselves to be more socially sustainable through infrastructure investments.

"Things like disability access, the toilets, the corridors, the ramps, so we are now going to implement them. Some of our plants already have them. Mainly the newer plants already have those. The older plants we are slowly changing."

Since the apparel manufacturers are also looking into converting their infrastructure to be more sustainable, we considered this theme under the social sustainability dimension. Further since infrastructure investment is considered under the philanthropic activities leading to the benefits to the society (Venkatesh Mani et al., 2016c), we considered this theme under the social benefits.

# 9.1.10. Theme 3 - Economic Development in Areas of High Priority

This theme was considered under Goal 1 focused on poverty. "Significant indirect economic impacts, including the extent of impacts" is the example indicator considered (GRI et al., 2015). Further "the total number of dependents supported through income from one job" coming under poverty reduction was also discussed as an indicator.

Sustainable clothing provides opportunity for workers and their families along the supply chain to earn benefits, resulting in the poverty reduction in the area (Gardetti & Subramanian, 2015). Further, these job opportunities provided are resulting in the poverty reduction (Lopez-Acevedo & Robertson, 2016). This role of poverty reduction is mainly discussed under the topic "Communication for Sustainable Social Change" (Servaes, 2017). Therefore, we considered this theme under the social sustainability dimension.

Further, interviewee #5 discussed why people enter the apparel industry under very bad conditions.

"In countries like Bangladesh, they are doing work in apparel industry because they are so poor. They have no other choice. They take the job, even under the worst conditions. But any other place where they have a choice, some sort of choice, they will be going for that."

Interviewee #5 further described how economic development has happened with apparel industry in Sri Lanka.

"In Sri Lanka, we have Company B owning garment factories in the northern part of Sri Lanka. I have visited some of these factories. They have employed people who have no other job in the area. So obviously whoever goes there, gets an income every month and they contribute to a decrease in poverty in that area."

The comments of the interviewee depicted the role of apparel industry as a poverty reducing agent. Since poverty reduction aspect was identified as a philanthropic approach relating to the society by (Venkatesh Mani et al., 2016a), we considered this theme under the social benefits to the society.

### 9.1.11. Theme 27 - Access to Public Spaces

This theme came under Goal 11 and discussed "11.7 By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities" as the SDG target. The interview supported this argument as made in the theme 25. Therefore, we considered this theme under theme "infrastructure investment" which belonged to philanthropic activities.

# 9.1.12. Theme 60 - Changing the Productivity of Organizations, Sectors, or the Whole Economy

This theme was connected to Goal 2 and 8. The sample indicator derived from GRI G4 Sustainability Reporting Guidelines was "Significant indirect economic impacts, including the extent of impacts" (GRI et al., 2015).

The significant impact created by the apparel industry in the whole community or economy was discussed by the interviewee #5 as follows.

"With huge apparel companies in Sri Lanka, they have a huge impact on the communities and all. They change the whole place where the factory is located. They have very diversified people which ultimately change the whole economy."

This comment proved the argument of huge economic impact causing the social benefits to the society at large. Therefore, we are considering this theme under the social sustainability dimension and the theme social benefits to the society in the conceptual framework.

### 9.1.13. Theme 50 - Research and Development

This theme belonged to Goal 9 and brought up performance indicators such as "Total environmental protection expenditures and investments by type" and etc. (GRI et al., 2015). Roca & Searcy (2012) described two indicators falling under Research and Development as number of patents and investment in R&D. How a company contributed to developing sustainable products via its R&D and innovativeness is also considered here (Labuschagne et al., 2005). Since R&D of the companies drive the society towards sustainability (European Commission, 2011) and makes a good change in the social sustainability dimension, we considered this theme under the social sustainability dimension.

### 9.1.14. Theme 99 - Technological Legacies

This theme fell under Goal 8 and 9. "Number, type and impact of physical and technological legacies" derived from GRI G4 Event Organizers Sector Disclosures is the sample indicator (GRI et al., 2015).

"Technology development" comes under Sustainable Supply Chain Management (Carter & Rogers, 2013). "Including variables like trust and commitment, the role of power and information technology into future investigations can give insights into the effective management of socially sustainable supply chains" (Yawar & Seuring, 2017, p. 638). Hence, we considered this theme under the theme social benefits to the society of social sustainability dimension. Further interviewee #5 described the practice of technological aspect in the social sustainability as follows.

"If company employees getting hurt because of some kind of machinery in the factory, it is very important to do a technological advancement."

Since technology development fell under the theme 50 on Research and Development because of their similarity, we integrated two themes when developing the conceptual framework.

# 9.1.15. Theme 64 - Disaster/ Emergency Planning or Response

Goal 1,3 and 11 covered this theme and the sample indicators were sector specific and as follows. They were derived from GRI G4 Oil and Gas Sector Disclosures, GRI G4 Electric Utilities Sector Disclosures (GRI et al., 2015).

- "Contingency planning measures, disaster/emergency management plan and training programs, and recovery/restoration plans"
- "Number of process safety events, by business activity"

The reports on sustainability described example indicators coming under this category as "number of emergency response operations supported, donations of staff time, assets and transport services and contributions of knowledge, skills and resources to humanitarian relief organizations" (Piecyk & Björklund, 2015). However, the respondents from apparel industry also provided us enough evidence that they were also considering this theme in their supply chain as well in order to make sure the betterment of the employees and the society.

The comments of interviewee #2 provided enough evidence.

"We built lot of tsunami houses and we renovated few houses in the recent flooding"

A deep clarification on this theme was done by interviewee #1.

"Nation building is where we give to the larger society. When the flood happened in May, initially we collected both with financially and with their time. And we can mobilize larger number of people across the country because we have like 2000, 4000 people. So, we can say "send 200 people to help this place". So, we did that with tsunami in Sri Lanka as well. Company A collected 2 million dollars together with our customers and other partners for the rebuilding effort. not only for our people, but for Sri Lanka as a whole. we put that into fund saffron or something, there was this tsunami some fund, and our chairman was part of that and we managed that. So, in

case of any national need, we are always there. There is a platform called "Asia Pacific Disaster Management Center" which is a body that has the Ministry of Disaster Management. Corporates, civil society, the forces everybody in it. We are also a part of that. So now even currently with the draught, they always send us updates, and ask for various things, so bowsers of water or whatever things. so that is the nation building national nation mindedness part of it as well. we do a lot of things for our employees and the communities, but for Sri Lanka as a whole also we help in times of nature crisis."

Therefore, considering the social benefits to the society we considered this theme under the social sustainability dimension.

# 9.1.16. Theme 86 - Partnerships

This came under Goal 17 and discussed under Medical sector using two sample indicators as;

- "R&D partnerships in which the company has been involved, with the aim of
  developing products or formulations for Index Diseases specifically targeting
  access issues in Index countries (adjusted for the number of molecules in the
  company's research pipeline)."
- "The company commits to work with relevant stakeholders, including universities, patient groups, local governments, employees, local and international NGOs and peers with the aim of improving access to medicine."

They were derived from Access to Medicine Index (GRI et al., 2015). However, partnerships with other stakeholders and communities assist in bringing benefits to the society while practicing social sustainability dimension (Tajbakhsh & Hassini, 2015). The following comment of Interviewee #1 further proved how these partnerships have evolved with the aim of improving social sustainability dimension.

"Now customers are more and more interested in seeing what we are doing, in this phase also, partnering with us. Various customers have programs like the GAP Phase Program and other customers are also like to join with us. Recently I had a discussion with several customers, and they wanted to partner with us in order to help us make a

better environment socially and environmentally in the areas we are having our manufacturing plants." Therefore, we considered this theme under social sustainability dimension and bringing benefits to the society.

### 9.1.17. Theme 10 - Access to Medicines

UN SDG Compass pointed out the example of "partnering with health care NGOs and public clinics to raise awareness and increase access to targeted health services for women and men workers and their families" (GRI et al., 2015).

"Medical room" is one of the many facilities provided to the workers, when the garment industries moved out from busy town areas to the industrial zones (Akter, 2016). As per the comments of the Interviewee #1, they were conducting public clinics in collaboration with government hospitals under social sustainability dimension.

"So now we do charity and philanthropy activities. We also do big sustainable projects like capacity building. So, from giving 10,000 LKR to somebody whose roof is leaking all the way to spending like Rs. 5 million on a cancer clinic in Kurunegala hospital." Interviewee #1 further mentioned about a breast cancer awareness they conducted which ultimately helped employees to identify the cancer at early stage and get cured. These arguments were further supported by interviewee #3 when discussing about mental health of the employees.

"All of our plants have a counselor. Not full time at least visiting. They come twice a week. They talk with the employees. They have all these free legal aid clinics. Psychiatric visits to the hospitals if it is a serious issue." Therefore, this theme was integrated with the "Partnership for social sustainability development" theme.

### **9.2.Appendix 2 - Education Benefits (EB)**

### 9.2.1. Theme 12 - Availability of a Skilled Workforce

Goal 8 on Decent work and economic growth covered this business theme. SDG Compass pointed out the example indicators as "Percentage of employees eligible to retire in the next 5 and 10 years broken down by job category and by region" and "Programs and processes to ensure the availability of a skilled workforce" derived from GRI G4 Electric Utilities Sector Disclosures (GRI et al., 2015).

"Investment in staff education and training" was a sustainability performance measure in supply chains (Jakhar, 2015b). As related to the training and education requirement to be a skilled worker in apparel industry, "a sewing machine operator requires four to six weeks of training" along with a primary education matching to meet with the training (Lopez-Acevedo & Robertson, 2016, p. 19). This aspect was further discussed by Interviewee #1 under social sustainability dimension in their company supply chain;

"So, you must have heard at our company, we give a lot of training, we develop people, even when they leave and go, we are okay. We think "okay, we have made a good person to go and work somewhere else and it is good for Sri Lanka"

As interviewee #1 further discussed,

"One is career advancement which is focusing on giving soft skills to these team members to progress in their careers. so, majority of the demand is for English classes or computer classes, communication skills, personality development things like that. Recently they have been requested for driving license."

Further, interviewee #3 also discussed on employee training as follows.

"We are giving training and awareness. Not only in the job, but somewhere else as well. So sometimes we spend hours to train them or make them aware".

As this theme discussed providing training and education for skill development, we considered this theme under educational benefits provided in the social sustainability dimension of our research.

### 9.2.2. Theme 13 - Capacity Building

Goal 4, 8 and 10 addressed this theme. SDG Compass described this theme providing examples such as "providing employees with continuous opportunities to improve their (job) skills for their current and future employment", "putting in place mechanisms to identify child labor and forced labor throughout global supply chains, and implement remediation when abuses are discovered" and "investing in business-driven poverty eradication activities (e.g. develop living wage policy)" derived from Access to Medicine Index (GRI et al., 2015). Although the given examples were from medical sector and they were varying their scope from one another, what we were

considering in this theme wass the opportunity given to employees to excel in their work through skill improvement.

Capacity building in workers is named as "career development" which "focuses on the training of employees and the provision of career guidance and higher-education opportunities" (Labuschagne et al., 2005, p. 7). Further, the necessity of capacity building of the workers in the premises of suppliers is very crucial to achieve economic benefits in any supply chain (Yawar & Seuring, 2017). Since majority of the apparel manufacturers are suppliers in the global apparel supply chain, capacity building is important for these companies. This argument was further supported by the comments of interviewee #1.

"Under skills development what we do is, we try to develop their skills which is not directly related to what they do, but which will help them may be have a secondary source of income. say for instance, they want to do a beauty culture program, so we have beauty culture programs within the company and then we help them like entrepreneurial guidance to them how can they set up a small salon or how do you market your products. within our company also we have platform called "my business". through this "my business" what happens is if I have some talents like I am a hair dresser, apart from my regular sewing work, I can advertise my business on the notice board. not only mine, my husband is like a plumber or somebody or my mother does bath packets, I can advertise that on the notice board. so, anybody who wants that service, can go and look, then the thing is not only me, my other family members also find a way to earn some money."

Therefore, we considered theme of capacity building under the social sustainability dimension.

### 9.2.3. Theme 38 - Employee Training and Education

Goal 8 discussed this theme and came up with the following indicators (GRI et al., 2015).

- "Average hours of training per year per employee by gender, and by employee category"
- "Percentage of employees receiving regular performance and career development reviews, by gender and by employee category"

 "Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings"

Education is considered as one of the societal commitments coming under the social sustainability dimension in the supply chain (Chardine-baumann & Botta-genoulaz, 2014). Therefore, we considered this theme under the educational benefits of the social sustainability dimension.

In apparel industry also a "primary level of education" is required to conduct a training session as a sewing machine operator, (Lopez-Acevedo & Robertson, 2016). Further education also has boosted the high skilled women ratio in the industry (Lopez-Acevedo & Robertson, 2016). Moreover "Investment in staff education and training" is introduced as a sustainability performance measure (Jakhar, 2015b). Goworek (2011) discusses this theme through an exemplary apparel company named "People Tree" where they conduct an educational and vocational training institute for low income families in Kathmandu, Nepal letting 450 women have a stable income through hand-knitting and 250 children to receive free schooling. In a country like Sri Lanka where free education is provided for 13 years, the training institutes relating to apparel are built upon the general education level of the country (Lopez-Acevedo & Robertson, 2016). At the same time, higher education standards is one of the major reasons for the country to maintain high labor standards in the garment factories (Ruwanpura & Wrigley, 2011).

The theme 12 on "availability of skilled workforce" also discussed the "training" aspect mentioned in this theme. Therefore, we paid attention specifically to "education" aspect in this theme.

### 9.3. Appendix 3 – Equity Improvement

### 9.3.1. Theme 7 - Non-Discrimination

This theme was covered under Goal 5,8 and 16 which respectively focused on poverty and decent work and economic growth. This theme disclosed "Total number of incidents of discrimination and corrective actions taken" as a sample indicator (GRI et al., 2015).

Discrimination was one of the issues coming under the social sustainability dimension of supply chains (Chardine-baumann & Botta-genoulaz, 2014; Egels-Zandén & Lindholm, 2015; Gurusinghe, 2012; V. Mani et al., 2015, 2016; Venkatesh Mani et al., 2016c; Piecyk & Björklund, 2015; Sadaat Ali Yawar & Stefan Seuring, 2015; Turker & Altuntas, 2014). Moreover, Venkatesh Mani et al., (2016c) categorized non-discrimination an aspect of equity. Therefore, we considered this theme under the equity improvement aspect of the social sustainability dimension.

Interviewee #1 described how they have taken steps in the apparel industry to avoid the discrimination amidst difficulties due to the lacking support of the responsible bodies;

"As a company, what we can do is on a macro platform, country has to do it. Say for instance, there is a person with disability. We are providing him enough facilities in our company. but if the national infrastructure is not in place, even though we have ambitious goals like, recruiting 2000 persons with disabilities working in our organization by 2020, no matter how much we align our own offices to aid. if the national infrastructure is not there, how are these people going to come to our office. Even the buses that we have are not geared assist to these people. Even not the bus stands. Basic national infrastructure doesn't support this. So as a company, we can aspire to it."

### 9.3.2. Theme 43 - Grievance Mechanisms

This theme connected with Goal 16 and following were the indicators suggested (GRI et al., 2015).

- "Number of grievances about human rights impacts filed, addressed, and resolved through formal grievance mechanisms"
- "Number of grievances about impacts on society filed, addressed, and resolved through formal grievance mechanisms"
- "Number of grievances about labor practices filed, addressed, and resolved through formal grievance mechanisms"
- "Do ALL workers along the value chain have access to a non-judicial grievance mechanism(s) (GMs)? If no, provide the approximate proportion of workers that do/ do not have access (disaggregate data by m/w and type of worker)"

Grievance mechanism can be classified under the equity aspect of the social sustainability dimension in the supply chain (Venkatesh Mani et al., 2016c). As interviewee #4 described the employees are provided with mental relief of grievance through a counsellor.

"All of our plants have a counselor. Not full time, at least visiting. They come twice a week. They talk with the employees. They have all these free legal aid clinics. Psychiatric visits to the hospitals if it is a serious issue. Our workforce is 70% women. Actually, men don't come and talk much with the counsellor. But women do. Their family issues, domestic violence, all these things."

The above-mentioned indicators investigate the solutions regarding discrimination issues such as human right and labor right violations and ultimately ensuring non-discriminatory actions. Therefore, we considered this theme combined with the theme "non-discrimination" in our conceptual framework.

## 9.3.3. Theme 17 - Diversity and Equal Opportunity

Both Goal 5 and 10 addressed this theme under equality and gender equality. "Company system have policies/programs promoting equal opportunities (regardless of gender and other diversities) that explicitly extends to the entire value chain?" and "Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity" are two of the example indicator coming under this theme (GRI et al., 2015).

Diversity and equal opportunity are considered under the equity aspect of the social sustainability dimension of the supply chains (Amulya Gurtu & Cory Searcy & MY Jaber, 2015; Venkatesh Mani et al., 2016a). Equal opportunity and diversity should be considered due to the rising human exploitation in the apparel industry as a result of the "labor intensiveness" of the industry and the "pressure imposed by competitive prices" (Gardetti & Subramanian, 2015). Further the importance of workforce diversity and inclusiveness was described as "the attraction and retention of a workforce that reasonably represents the customer and communities in which the organization operates" (ISM, 2012, p. 3).

Moreover, Interviewee #1 explained how diversity and inclusiveness have been addressed in the apparel supply chain over the years by changing the names of the positions and letting the workers feel that they are a part of a team.

"Garment industry, may be not today so much, but if you take 5 to 7 years ago, there was a stigma attached to it. Lots of people did not want to come and work here, because they were called out as "garment kello, jukee kello". So, we started this program "women grow beyond" to kind of mitigate that situation, those labels. So, we can reposition the machine operators. Now for us at our company we don't call the machine operator. We call them team members"

How diversity in the apparel industry is encouraged by recruiting disabled people into the company workforce was discussed by the interviewee #4 as follows.

"We are having active policies to get the disabled people into work. In Company D alone, we have about 140 hearing impaired people."

Further, interviewee #4 described how equal opportunities are given despite the age in a leading apparel manufacturing company.

"We hope to have things like senior people in the work force with this new sustainability strategy of the company. Like after 55 years, they have to retire, you know. But we are trying to see how we can get them involved in back in business. Because that's going to be an issue to Sri Lanka. Our ageing population is high. And they are going to be a burden to the government. Therefore, we are going to look into how they can be a part of the company at least as consultants, part time workers or anything like that."

The below comments of the interviewee #1 further approve the above argument on equal opportunities.

"And the other one is we want to look at getting older people who are going to retired, facilitating them to stay back in work and getting older people to come into work. Sri Lanka is the fastest aging country in the Asian region. So, and when it comes to apparel industry, people who have started 30 years ago when the company started, people who was still here, they have such a lot of technical knowledge. so how do we facilitate them. what happens is millennials coming, and so these people are also feeling that they have so much of technical knowledge and how are they going to share that

knowledge, transfer that knowledge. I have seen millennials that they are a bit impatient with these people. They are older and slower, and they are not that tech savvy and they are not on what's app and all that. We want to create an environment where we also help them to get on this what's apps and other things and they also feel comfortable to continue work after the retirement age. and also look at the medical side of them, may be offer shorter working hours, come and work 8 hours instead of that. may be 5 hrs. and so on."

### 9.3.4. Theme 34 - Inclusive Decision Making

This theme was categorized under the Goal 16. Stakeholder engagement/participation and employee engagement were discussed under this theme.

Stakeholder engagement comes under the social sustainability dimension (Coppola et al., 2014) while employee engagement is also a social initiative in sustainable supply chain (Gopalakrishnan et al., 2012). Employee engagement in charitable activities including volunteering comes under economic sustainability dimension of the pharmaceutical industry (Narayanamurthy & John, 2015). However, in apparel industry, they consider "volunteering" under the social sustainability dimension while encouraging the employee engagement. The following comment of the interviewee #1 proved this;

"Employee volunteerism is also important. Employees they volunteer hours, they come to help us to do awareness programs. some of this examination awareness programs are done by our own employees to the wider audience. we actually count the number of volunteer hours that the employees take."

Interviewee #1 further described how they have improved employee engagement based on the diversity of the employees in their supply chain.

"We ensure that physically loss employees and employees with disabilities are part of decision making bodies. sometimes the nutrition needed by the persons with disabilities. so, we have food committees, safety committees, fire committees, health committees, we have all these committees. so, we want them also to be a part of it because their needs are very different."

Since stakeholder engagement improves fairness in the supply chain via inclusive decision making, we considered this theme under the equity improvement theme in the conceptual framework.

### 9.4. Appendix 4 – Gender related Equity Improvement (EqITWO)

### 9.4.1. Theme 20 - Women in Leadership

This theme belonged to Goal 5 on gender equality and following were the sample indicators by SDG Compass (GRI et al., 2015).

- "Report the composition of the highest governance body and its committees by Executive or non-executive, Independence, Tenure on the governance body, Number of each individual's other significant positions and commitments, and the nature of the commitments; Gender, Membership of under-represented social groups, Competences relating to economic, environmental and social impacts, Stakeholder representation"
- "Proportion of women interviewed who indicate that they are comfortable voicing their opinions about unequal treatment"
- "Representation of women in i) management positions, ii) skilled (non-management) positions and iii) unskilled positions"
- "Where relevant, the proportion of women representatives in leadership roles in trade unions, workers' committee and/or associations"

When considering the current situation in Sri Lankan apparel industry, there is very lower number of women in management position despite the fact that majority of the employees are women (RATNASINGHAM, 2015; Wage Indicator, 2017). Therefore, the industry has taken steps to mitigate this negative condition.

Interviewee #4 commented how they are giving opportunity to women to be leaders in the apparel supply chain.

"In our integrated sustainability strategy, we are looking at one to one ratio in female leadership. Fifty to fifty men women have to be in the workforce. As a result, this year we are looking at a KPI to improve the number of promotions getting by female employees. Because we did a study to see, although 75 to 80 percent of our grassroot

employees are female, when you are going up the ladder it is reducing. Only an 8% of women are in leadership roles."

The comments of interviewee #1 further approved this argument.

"if you take, diversity at work, it is not only about gender, by 2025 we are hoping to have one to one ratio in management. in apparel industry, it is very tough because lots of operational roles in apparel industry is very male dominant."

By giving equal leadership opportunities for both men and women, this theme discussed the fairness towards gender. Therefore, we considered this theme under the gender related equity improvement of the social sustainability dimension.

# 9.4.2. Theme 42 - Gender Equality

This theme adhered to Goal 5. Following were the sample indicators pointed out by SDG Compass (GRI et al., 2015).

- "Average hours of training per year per employee by gender, and by employee category"
- "Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity"
- "Percentage of employees receiving regular performance and career development reviews, by gender and by employee category"
- "Total number and rates of new employee hires and employee turnover by age group, gender, and region"

The proportion of female workers is relatively high in the textiles and apparel industry (Lopez-Acevedo & Robertson, 2016). Therefore, gender equality is an important theme in socially sustainable supply chain (V. Mani et al., 2015; Turker & Altuntas, 2014; Yawar & Seuring, 2015a). Further, gender equality is considered as a sub category of "equity" (Henriques & Richardson, 2004; V. Mani et al., 2014). Therefore, we considered this theme under the gender equity improvement in social sustainability dimension.

As the above indicators suggested they are also a part of other themes. For example, "Average hours of training per year per employee by gender, and by employee

category" came under the theme of "education and training" as well. Hence this points out that "gender equality" is a vast concept.

However, interviewee #5 discussed the gender equality of the apparel industry considering the higher number of women.

"Garment industries mostly women. So, whatever your impact is also on the women or on the gender balance."

The interviewee #1 further approved this argument.

"If you take, diversity at work, it is not only about gender, by 2025 we are hoping to have one to one ratio in management. in apparel industry, it is very tough because lots of operational roles in apparel industry is very male dominant."

The apparel manufacturers in developing countries are trying to balance the gender disparity in this sector.

# 9.4.3. Theme 53 - Women's Empowerment through Technology

This theme belonged to Goal 5 and "Increased access to information and technology for women (women's participation in programs enhancing the use of enabling technologies)" was the sample indicator depicting this theme (GRI et al., 2015).

Women empowerment in apparel supply chain is discussed under the social sustainability dimension (Khan, 2009). Therefore, we considered this theme under the gender related equity improvement of the social sustainability dimension understanding the equal opportunities given for women to learn and nourish. As interviewee #1 commented:

"Women's Advocacy is very big for us. We have women's empowerment program because the majority of our workforce is females and because of that we have a Director of women's advocacy from the central office."

Interviewee #1 further described how they conduct computer classes for the female workers upon their request.

"We have this program, normally the cutting part of the stuff is done by men. Women don't like to use those blades and things. Then mechanical work, electrician work. We have a special training for them to if they want to be that. So, there are instances where

they say, 'I want to learn'. And we have given them the training and some of them have been absorbed as an electrician or a mechanic and they are no longer doing sewing." These comments depicted that more opportunities for women are given to expose themselves into the fast-moving world.

# 9.5. Appendix 5 – Ethical Improvement (EI)

#### 9.5.1. Theme 31 - Anti-Corruption

This theme followed under Goal 16 and discussed about communicating and offering training on policies and procedures related to anti-corruption, while publicly stating their stance regarding corruption and working against actions such as bribery and extortion (GRI et al., 2015).

Fighting against corruption is a sub field in the social sustainability dimension in the supply chain (Chardine-baumann & Botta-genoulaz, 2014). Institute of Supply Management (ISM) strictly mentions that the corruption at all means will not be tolerated when developing a sustainability framework (ISM, 2012). Further, in Latin American CSR history, corruption was identified as one of the social issues which need attention (Gil-aluja et al., 2015). The companies in the developing countries will have to face "latent liabilities and operational risks" if they reject their responsibilities to address the issue on corruption, as the governments in developing countries are very poor in acting against corruption (Klassen & Vereecke, 2012). Hence, this theme was considered under the ethical aspect of the social sustainability dimension.

Interviewee #6 discussed the corruption in the medium sized apparel company where they manipulated the reports submitted to the buying company. Further their operations are in order and sustainable only on the day of the factory visits by the auditors of the buying company. There have been situations where they even bribed these auditors to get the business contract. This showed the necessity of anti-corruptive actions to win a sustainable operation in the apparel supply chain.

#### 9.5.2. Theme 40 - Ethical and Lawful behavior

This theme was related to Goal 16 and discussed "internal and external mechanisms for reporting and seeking advices on concerns about unethical or unlawful behavior"

along with "describing the organization's values, principles, standards and norms of behavior such as codes of conduct and codes of ethics" (GRI et al., 2015).

In our conceptual framework, we discussed this ethical behavior and lawful behavior of the company separately. Therefore, the lawful behavior was discussed under the theme 30 on "compliance with laws and regulations". Hence, we discussed only the "ethical behavior" here.

The ethical behavior of the organization does not discuss only "moral attitude and ethical judgment" within the interpersonal relations, but also "the relations between society and nature" (Gardetti & Subramanian, 2015). Since luxury textile processing industries are more likely "small boutique shops" sometimes they do not have trained staff and this leads to "unethical work practices" (Tang & Zhou, 2012). Further, as most companies are profit driven, through their ethical behavior they can become more profitable as they can ask for higher prices, reach a higher market share and explore new markets for their products by value additions gained via activities such as remanufacturing, recycling, and using eco-friendly, ethical, socially responsible raw materials in the production (Dabija et al., 2016). Further the Institute of Supply Management points out that "every supply management professional is responsible for behaving ethically and actively promoting ethical conduct throughout the supply chain" (ISM, 2012, p. 3).

When the overall content of the interviews was considered, we can witness that big apparel companies are having ethical and lawful behavior except for the medium sized apparel company discussed by the interviewee #6.

## 9.6. Appendix 6 – Health & Safety Improvement (HS)

#### 9.6.1. Theme 8 - Healthy and Affordable Food

"Healthy and affordable food" was discussed under the theme of Hunger in Goal 2. Although the indicators pointed out under this theme are specific to "Food Processing Sector" (GRI et al., 2015), the relevance of "access to healthy, nutritious and affordable food" was further proven by the comments of interviewee #5 on how supplying food leads to the betterment of the employees.

"By providing food to the employees in the canteen, a nice working environment is created."

Interviewee #5 further continued the explanation on the argument as;

"Apparel company may provide organic food or healthy range of food in the canteen."

So that's a low cost for the employees and they can go and eat there."

Meanwhile, interviewee #6 described the supply of food practices in a medium sized apparel company regarding the poor quality of the free food which was also ignored by the management of the company. On the other hand, similar situations have been reported where food poisoning was a major issue in the Sri Lankan apparel industry in year 2014 (Perera, 2014). Considering the high impact created on the human factor via healthy and affordable food, we considered this theme under the social sustainability dimension. Moreover, in a way, this theme can also be considered as an integration of the themes 69 and 70 (later discussed).

Provision of healthy free food to the workers in the apparel industry of Sri Lanka has already been a legal requirement since 1993 considering the wellbeing of the workers (Perera, 2014). However, research conducted so far in SSCM have not identified this aspect as a common sustainable practice in the social sustainability dimension. Hence, we considered this theme under the social sustainability dimension in the apparel supply chain even though it is a legal requirement.

#### **9.6.2.** Theme **69** - Food Prices

This theme comes under Goal 2 in SDG Compass. The general indicator derived from UN Global Compact-Oxfam Poverty Footprint is "Measure of incurred price fluctuations and inflation (i.e. changes in housing and locally-available food prices)" (GRI et al., 2015). Since the foods are provided in the apparel industry, we considered this theme under "healthy and affordable food" (Refer theme 8 for explanation).

#### **9.6.3.** Theme **70** - Food Safety

This theme also fell under Goal 2. The indicators considered here were also related to food processing sector and they are "Percentage of production volume manufactured in sites certified by an independent third party according to internationally recognized food safety management system standards" and "Policies and practices on antibiotic, anti-inflammatory, hormone, and/or growth promotion treatments" (GRI et al., 2015).

Since the foods are provided in the apparel industry, we considered about the safety of foods under the theme "healthy and affordable food" (Refer theme 8 for explanation).

#### 9.6.4. Theme 5 – Access to WASH

Only "Giving access to water" concept coming under this theme was discussed under "health and safety improvements" since providing food and water is a basic requirement of the workers. Health and Sanitation aspect of this theme was considered under the "Social sustainability Practices for the Benefits of the society" (Refer SB4 for more information).

### 9.6.5. Theme 9 - Occupational Health and Safety

This theme was discussed under Goal 3 on Health. The following indicators were pointed out as a few examples (GRI et al., 2015).

- "Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender"
- "Workers with high incidence or high risk of diseases related to their occupation"
- "Proportion of local health workers/authorities interviewed who perceive that
  workers along the value chain (m/w) are experiencing increased exposure to
  sexually transmitted diseases, including HIV/AIDS (when compared with national
  average)"
- "Approximate proportion of workers exposed to health hazards with access to Personal Protective Equipment (PPE) and training on its appropriate use"
- "Work-related injuries frequency rate (m/w), occupational diseases frequency rate (m/w), severity rates of work-related injuries and occupational diseases (i.e. lost work days per year) (m/w), and number of work-related fatalities (m/w) along the value chain in last three years (m/w) and, where available, work-related fatalities of smallholders (m/w)"
- "Percentage of total workforce represented in formal joint management—worker health and safety committees that help monitor and advise on occupational health and safety programs"

Occupational health and safety was discussed under the social sustainability of the SSCM (Ahi & Searcy, 2015b; Akter, 2016; Venkatesh Mani et al., 2016c). Ruwanpura

(2014) discussed how addressing "ill health and work place injuries" can create a discussion on the health and safety code of the employees in the apparel manufacturing factories. Hence, monitoring indicators such as "ratio of average days not injured to the total days worked (per employee)" is important to improve the social sustainability of the supply chain (Hutchins & Sutherland, 2008). All the interviewees also stressed the importance of safety at the working place.

#### 9.7. Appendix 7 – Improved Labor Conditions (R2)

# 9.7.1. Theme 19 - Workplace Violence and Harassment

This theme fell under the gender equality concept of Goal 5 and further described as "establish a zero-tolerance policy towards all forms of violence at work, including verbal/ and/ or physical abuse and prevent sexual harassment" by SDG Compass (GRI et al., 2015).

Apparel industry is known for its violence and harassment through exploitation of people (Gardetti & Subramanian, 2015). Some of the actions are "social abuses, including instances of long hours", "unsafe working conditions", "emotionally or physically abusive supervisors", "locked dormitories", and "the exploitation of pregnant workers" (Hiller Connell & Kozar, 2012). This is where Sri Lanka won its competitive advantage over the others in global apparel supply chain with "high labor standards and levels of compliance at sites of manufacturing", resulting the sweatshop free culture in the country (Ruwanpura & Wrigley, 2011). Since the issue of sweatshops was considered under the social sustainability dimension by Venkatesh Mani et al., (2016c), we considered this theme under labor conditions.

Interviewee #5 further discussed violence and harassment in the apparel industry.

"If you are going every day to an office, you have to make sure people there are not bullied. People there can come without being harassed. Sexually harassed or harassed because they look different. That is very important. That makes a person come and work. So, we are strict about that."

This comment proved the real situation in the apparel industry in Sri Lanka where employees are safe.

# 9.7.2. Theme 94 - Sexual Exploitation

This theme was classified under the Goal 16. "Does the business have a policy on the prohibited types of client entertainment (e.g. sex industry) and how does it communicate this policy internally?" is the sample indicator derived from The Women's Empowerment Principles: Reporting on Progress (aligned with GRI G4) (GRI et al., 2015).

Sexual exploitation was an issue in the apparel industry many years back because of the domestic side of the industry (Kelegama, 2009). However, as per the comments of the interviewees, the arise from the stigma attached to the apparel industry, social exploitation within garment factories is very poor. Further, this theme is verisimilar to theme 19 on 'workplace violence and harassment'. Therefore, we considered this theme under the labor conditions of the social sustainability dimension.

# 9.7.3. Theme 41 - Freedom of Association and Collective Bargaining

This theme was associated with Goal 8 and following were the sample indicators (GRI et al., 2015).

- "The percentage of total employees covered by collective bargaining agreements"
- "Do all major employers along the value chain, including the Company (HQ level) and its subsidiaries, recognize the right to freedom of association AND the right of its workers to collectively bargain (e.g., to join any trade union)?"

"Freedom of association" comes under the social sustainability dimension in supply chain (Akter, 2016; Chardine-baumann & Botta-genoulaz, 2014; Egels-Zandén & Lindholm, 2015; Huq et al., 2014). Since freedom pf association and collective bargaining aspects are ultimately affecting the employees, this theme was considered under the labor conditions of the social sustainability dimension as further suggested by Venkatesh Mani et al. (2016c).

Interviewee #1 discussed how the freedom of association is empowered in their company as follows.

"We ensure that physically loss employees and employees with disabilities are part of decision making bodies. sometimes the nutrition needed by the persons with disabilities. so, we have food committees, safety committees, fire committees, health committees, we have all these committees. so, we want them also to be a part of it because their needs are very different."

Further, the interviewee #3 discussed collective bargaining aspect.

"We do not apply all the requirements of our buyer. We can argue and negotiate with them as suits for our country."

The comments of interviewee #1 further explained this argument as follows.

"No. the machine operator needs to be able to, with her weekly salary, go to the movies or theater twice a week, go out to coffee or dinner." and I was like "hello, even I don't do that". Our life style is very different. you can't judge from the western ideals and calculate something from the western ideal and tell us where the apparel industry is not paying the wage. I am not saying that may be other apparel companies who are not paying that wage. but big players, our customers won't come to us if we are not paying that. So, they can't judge this whole living wage story. that's why we want to be sustainable compensation for all that we have a methodology or a framework on which that we have calculated, and we are paying an equitable salary which is customized to Sri Lanka or India or Bangladesh or wherever. It doesn't have to be the UK or Singapore standard."

This statement further illustrated that to which extent the collective bargaining power is extended over the supply chains with examples.

# 9.7.4. Theme 46 - Labor/Management Relations

This theme addressed "making awareness on employee rights/ collective agreements". Labor management relationship is where the both parties can earn a win-win situation by minimizing the conflicts and this is the platform where the management decides to work with unions or without unions (Md. Mohiuddin, 2014). Hence, this theme encourages the human rights we considered this theme under the labor conditions of the social sustainability dimension (Venkatesh Mani et al., 2016c).

As per the interviewees' overall comments the status of labor/ management relations was vague in the Sri Lankan apparel supply chains. On the one hand, certain apparel manufacturers do not tolerate the unions in the company, while some accept their existence and work in unison. On the other hand, there are certain NGOs assisting and training garment workers to stand up for themselves while fulfilling their duties as well (Abraham, 2017). As a result, the labor/ management relationship has improved compared to the past years.

# 9.8. Appendix 8 – Child and Bonded Labor Conditions (R1)

### 9.8.1. Theme 47 - Labor Practices in the Supply Chain

This theme fell under the Goal 8 and the following indicators were considered as suggested by SDG Compass (GRI et al., 2015).

- "Does the Company system have a policy/code that addresses labour rights and standards along the value chain? If yes: i) Is compliance with this policy promoted by the Company system along the value chain? If so, how? ii) Do ALL other major employers along the value chain have a policy/code on labour rights and standards? If no, what is the proportion of those who have a policy/code? iii) Are there discrepancies between the Company's and other employers' codes/policies and minimum standards (as recommended by ETI)? If so, what are the discrepancies?"
- "Significant actual and potential negative impacts for labor practices in the supply chain and actions taken"
- "Does the Company system screen and monitor its major suppliers for compliance with labour rights and standards (as per the Company's code/policy)? i) If yes, what are the mechanisms in place to monitor compliance? ii) What are the core indicators evaluated? iii) Does the Company have a mechanism or system in place to deal with suppliers who are noncompliant?"

Labor practices falls under the social sustainability dimension in the supply chain (Agbonkhese, 2010; Akter, 2016; Ha-Brookshire & Hawley, 2014; Labuschagne et al., 2005; Venkatesh Mani et al., 2016c; Marc Winter A. Michael Knemeyer, 2013). No

matter the pressure imposed on the companies by the "government and international communities", they give priority to profit making over the labor practices (Akter, 2016). However, the labor practices in developing countries are gaining attention by NGOs, media and customers since the suppliers of global brands are located in these countries (Klassen & Vereecke, 2012).

Interviewee #5 explained how meeting labor rights of employees' effect on the apparel supply chain and why exporting apparel manufacturers in Sri Lanka especially need to pay attention on this aspect.

"Sri Lanka is exporting these apparel, no? the buyers in other countries are demanding sustainability into a certain extent. Not 100%. But if they find out that some of these clothes are manufactured under unethical conditions, they would not buy them. They won't say "I don't know I buy whatever my consciousness allows me to buy, but when I find out that these guys are violating the human rights of the staff, under really bad conditions, I don't want to buy them, I want to buy something else". So, it is a requirement for apparel companies to have at least a basic system which is sustainable."

Moreover, the above-mentioned indicators depicted that they discussed the bigger picture relating to labour practices. Therefore, we paid attention specifically to the following two themes under "labour practices in the supply chain" because of their significant connection to the labor rights and standards discussed across the supply chains (McClelland, 2017; Moulds, 2017).

- Abolition of child labor (Refer Theme 35)
- Elimination of forced or compulsory labor (Refer Theme 37)

#### 9.8.2. Theme 35 - Abolition of Child Labor

This was associated with Goal 16 and they pointed out "operations and suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor" as an indicator (GRI et al., 2015).

Child labor is one of the social matters (Chardine-baumann & Botta-genoulaz, 2014) rising because of the apparel industry (Hiller Connell & Kozar, 2012; Roos et al., 2016). Child labor is mainly compromised in the luxury apparel industry (Gardetti & Subramanian, 2015). However, Sri Lankan apparel industry is far ahead with its policies regarding banning of child labor (Lopez-Acevedo & Robertson, 2016). All the interviewees agreed with the fact that child labor is no longer an issue in the Sri Lankan apparel industry. Their stance was further supported by the "Garments Without Guilt" concept of Sri Lanka Apparel (Joint Apparel Association Forum Sri Lanka, 2009).

# 9.8.3. Theme 37 - Elimination of Forced or Compulsory Labor

This theme came under Goal 8 and they discussed "Operations and suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of all forms of forced or compulsory labor" as the sample indicator (GRI et al., 2015).

Forced labor is an issue coming under social sustainability of the supply chain (Chardine-baumann & Botta-genoulaz, 2014). With the current situation of the apparel industry, interviewee #5 discussed on labor conditions introducing the concept of "modern slavery".

"There are always things you can do better. At least the fair working conditions need to be provided, not like modern time slavery which is happening in other countries. But in Sri Lanka the condition is pretty okay."

This comment was agreed further with the fact that forced labor is no longer an issue in the Sri Lankan apparel industry as a result of the "Garments Without Guilt" concept of Sri Lanka Apparel (Joint Apparel Association Forum Sri Lanka, 2009). Moreover, there are NGOs who are empowering garment workers to make sure their labor rights and human rights are protected (Abraham, 2017).

# 9.9. Appendix 9 – Regulatory Responsibilities (RR)

# 9.9.1. Theme 29 - Effective, Accountable and Transparent Governance

This theme fell under Goal 16 of Justice. SDG Compass discussed about "complying with laws and seeking to meet international standards; requiring and supporting business partners to do the same" along with the few examples of indicators such as "reporting processes for the highest governance body to ensure conflicts of interest are avoided and managed, reporting whether conflicts of interest are disclosed to stakeholders" (GRI et al., 2015).

Corporate governance comes under the social dimension of sustainability (Tay et al., 2015). By implementing internal controls over accountability and governance, integrity and transparency of the financially responsible supply chain can be managed (ISM, 2012). Sri Lankan apparel known as the "Garments Without Guilt" is the only Asian country to attain concessions by the European Union because of the good governance (The Island, 2007). Even after 10 years, the major apparel companies are maintaining a good governance as per the comments of the interviewee #1, #2, #3 and #4. However, interviewee #6 pointed out that a medium sized apparel manufacturer does not conduct good governance or transparency in the day to day business.

# 9.9.2. Theme 49 - Protection of Privacy

This theme was addressed under the Goal 16 and the sample indicator was "total number of substantiated complaints regarding breaches of customer privacy and losses of customer data" (GRI et al., 2015). In order to characterize integrity and transparency of the supply chain, complying with applicable laws and regulations is a must which includes safeguarding the privacy and security of customer data as well (ISM, 2012). Further this "customer privacy" comes under social sustainability dimension (Dissanayake et al., 2016; Piecyk & Björklund, 2015).

This theme was not discussed by any of the interviewees due to the sensitivity of the theme and the information need to be discussed.

# 9.9.3. Theme 30 - Compliance with Laws and Regulations

This theme fell under Goal 16 and discussed the following sample indicators (GRI et al., 2015).

- "Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations"
- "Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services"
- "Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship, by type of outcomes"
- "Total number of incidents of non-compliance with regulations and voluntary codes concerning the health and safety impacts of products and services during their life cycle, by type of outcomes"
- "Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes"
- "Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data"

Suppliers being socially sustainable indicate that they adhere to the local regulations and other regulations (Venkatesh Mani et al., 2016a; Reefke & Mattia, 2013; Sancha et al., 2016). Hence, compliance is regarded as a way to ban the criticism from the stakeholders and win the name for social responsibility while improving economic performance (Yawar & Seuring, 2015b).

Further, the following comment from the interviewee #3 depicted that this theme links with the social sustainability dimension and goes beyond compliance;

"The legal requirement and the customer requirement are the base line in social sustainability. But our business cannot be driven only maintaining that. We have to go beyond that."

Interviewee #4 depicted how complying with the requirement of the customers improved the apparel company's sustainability dimension;

"Brand A has this very high compliance policies which are stringent even than UN or ILO. So once your company comes to that kind of a level, you know that you are far better than the rest.".

However, interviewee #6 commented;

"the employees of the company long lasts because of the compliance requirement of the buyers."

Apparel manufacturers are working hard to ensure the social sustainability is met beyond compliance. This showed that the apparel manufacturers in Sri Lankan context have understood their role and learning that social sustainability needs to be a part of the day to day operation to survive in the industry in the long run.

# 9.10. Appendix 10 – Improved Wage Condition (WC)

### 9.10.1. Theme 2 - Earnings, Wages and Benefits

This key business theme was addressed under Goal 1 on poverty. The following indicators were some of the examples coming under this theme (GRI et al., 2015).

- "Do major employers along the value chain and the wider Company system negotiate wage and benefits standards through collective agreement?"
- "Does the Company have a mechanism/policy/code that seeks to ensure that small-scale suppliers, smallholders and/or distributors are paid a fair price for goods, services, and/or crops supplied to the Company, enabling sustainable trade? If yes, provide details."- since we are not looking into the supplier aspect of this company, we are not considering this kind of indicators.
- "Estimated proportion of workers (m/w) along the value chain who have other jobs to sustain their livelihoods"
- "Range of company benefits for permanent vs. part-time contractual workers in low and high seasons"
- "Range of company benefits for full time vs. part time workers (along the value chain)"
- "Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation"

"Wages" and "benefits" are considered under social sustainability dimension of supply chain (Campbell, 2007; Egels-Zandén & Lindholm, 2015; Huq et al., 2014; V. Mani et al., 2015; Venkatesh Mani et al., 2016a, 2016b; Rajak & Vinodh, 2015; Sadaat Ali Yawar & Stefan Seuring, 2015).

Interviewee #3 explained how the wages or payments in the apparel industry were addressed under the social sustainability dimension.

"If we take the payments, the customer is asking only to pay the legal required. But if we pay that legal required amount, we can't sustain. So, we pay more than legal required and more than industry standards. If the legal requirement is LKR 10,000 and the industry standard in LKR 15,000, we need to pay more than LKR 15,000 to retain them. We are always going beyond compliance."

Interviewee #1 also elaborated on this comment further.

"When it comes to the community what we want to do is, in terms of global employer choice, trying to look at sustainable compensation. Story in the market about apparel industry, fashion and life style industry is living wage. You have heard that always saying "people are not paying a living wage". So, we know internally that we are paying a very good salary to our employees. Some of them are earning more than teachers. They have the capability of earning more than nurses and doctors because they have a basic salary, they have incentives, they have team incentives, group incentives. individual incentives. some overtime. then from multi skilling, also they get incentives. So, they have the ability to earn. But through this sustainable compensation, we want to have a methodology in which to calculate. So, when somebody comes and says the living wage for apparel industry is LKR 73,000 it's not. Even some executives don't earn LKR 73,000. living wage and it is a subjective thing. So, when somebody in the UK, few years back had this discussion with me, and said, "No. the machine operator needs to be able to, with her weekly salary, go to the movies or theater twice a week, go out to coffee or dinner." and I was like "hello, even I don't do that". Our life style is very different, you can't judge from the western ideals and calculate something from the western ideal and tell us where the apparel industry is not paying the wage. I am not saying that may be other apparel companies who are not paying that wage. but big players, our customers won't come to us if we are not paying that. So, they can't judge this whole living wage story. that's why we want to be

sustainable compensation for all that we have a methodology or a framework on which that we have calculated, and we are paying an equitable salary which is customized to Sri Lanka or India or Bangladesh or wherever. It doesn't have to be the UK or Singapore standard."

The leading export apparel manufacturers are conscious about the payment they make, and the benefits offered to the employees mainly because of the pressure from the focal companies. Therefore, because of the importance of wages and benefits emphasized in the literature and interviews, when the conceptual framework is developed, these two aspects are considered separately.

# 9.10.2. Theme 16 - Equal Remuneration for Women and Men

Both gender equality in Goal 5 and equality in Goal 10 discussed this theme. Following were a few example indicators of this theme (GRI et al., 2015).

- "Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation"
- "What is the frequency of periodic equal pay reviews/audits, including basic pay, overtime and bonuses? What is the methodology for the equal pay reviews? What were the findings of the last review and is a plan of action underway to redress the gender wage gap found in pay reviews, or plans to undertake such actions in the future? What is the explanation of source, nature and likely causes of any differences between women's and men's pay within the business?"

Equal remuneration has been identified as one of the indicators in the Corporate Social Responsibility (CSR) reports (Dissanayake et al., 2016; Piecyk & Björklund, 2015). When it comes to remuneration pattern in the apparel industries of developing countries, the women are paid 31 percent and 64 percent less than men respectively in India and Bangladesh (Lopez-Acevedo & Robertson, 2016). With the comments mentioned in above themes, all the interviewees representing export apparel manufacturing companies agreed upon the stance that equal remuneration is actively occurring in the Sri Lankan apparel supply chain.

# 9.11. Appendix 11 – Workers' and Employees' Conditions (WEC)

#### 9.11.1. Theme 54 - Work Life Balance

Goal 5 described the indicator in this theme as "What is the business' policy regarding flexible working and how many employees – male and female – have used this provision? What steps are the company implementing to encourage the uptake of flexible working?" (GRI et al., 2015).

Work life balance is discussed under social sustainability dimension (Closs et al., 2011; Keating et al., 2008) which is important to improving the working conditions. Interviewee #1 discussed about this under social sustainability dimension of the apparel supply chain.

"Obviously, we know that when it comes to women, we have to do this job, go back and do the caregiver's job. So how do you balance these two things. So, we have training programs and awareness programs from emotional intelligence, marriage counselling. We have an inhouse counselor and may be visiting counsellors who help people to balance those two. So that their job and family life will be balanced because this has always been a challenge in very rural areas where we provide employment for women. So, if you take 'Area A', I always talk about 'Area A' because I was there for many years. Their fathers or their husbands are like bulath farmers or things like that. So now their daughters or heir life is the one who is going and earning 20,000 and 22,000 whatever rupees. So sometimes they can't handle this. We are in a patrilocal culture. Our culture is such that more male dominant. So, when these people started becoming the main bread winners of the family, sometimes the fathers and people can't handle this. Husbands can't handle it. Then that sometimes also helps to emerge the phase of violence and various harassments and things like that. So how do they balance all this is what we do through work life balance."

The strategy to improve the flexible working hours of women working in the apparel industry was described by the interviewee #4.

"Under female empowerment, what we are trying to do is allow flexible working hours for women. Put that baby into the day care in the plant. And they can bring him back when she is going, or the parent can come and collect the baby or any way it is a long day care from 8 to till the evening."

Since work life balance is a combination of many aspects such as flexible working, support with child care, transport facilities to reach work, housing facilities for the employees' family etc., we considered many themes under this topic when developing the conceptual framework.

#### 9.11.2. Theme 21 - Childcare Services and Benefits

This theme fell under Goal 5 on gender equality and "What is the business' policy and provision of childcare facilities and how many employees, if any, use this facility?" was the sample indicator pointed out (GRI et al., 2015).

"Baby care center with equipment" was one of the many facilities provided to the workers, when the garment industries moved out from busy town areas to the industrial zones (Akter, 2016). However, in countries such as Bangladesh, the child is taken care by a neighboring relative when the parent comes to work, although the requirement for nurseries are raised under the code of conduct of the buyers (Huq et al., 2014). Since baby care centers facilitate the workers' and employees' working conditions, we considered this theme under the social sustainability dimension in our conceptual framework. Further, by providing this type of necessities of the employees, company positively impact on the employee performance (Hutchins & Sutherland, 2008).

Interviewee #4 explained how the childcare services are provided in one of the leading apparel company in Sri Lanka.

"We also have day care centers. Not all plants. But now we are trying to have more. Under female empowerment, what we are trying to do is allow flexible working hours for women. Put that baby into the day care in the plant. And they can bring him back when she is going, or the parent can come and collect the baby or any way it is a long day care from 8 to till the evening."

Current apparel manufacturers are keen on providing baby care centers understanding the issues faced by workers and assisting them to improve their working conditions.

#### 9.11.3. Theme 26 - Sustainable Transportation

This theme was classed under Goal 11 on sustainable cities and communities. Although majorly this theme discussed about the environmental impact created by transportation, there was another underlying area as "making transportation safer and more affordable for all" addressing the social dimension. Moreover, literature also catered enough proof on the necessity of considering this theme under the social sustainability dimension of supply chains. Poor transportation is a social issue among other social factors in the apparel industry (Lopez-Acevedo & Robertson, 2016). Transport is important for lady apparel workers to ensure their personal safety because of the lack of public transportation between their house or boarding places and workplace (Ruwanpura, 2014). This argument was further proved by the comments of Interviewee #1;

"Like our former managing director, Mr. D who was here, he had this idea that we must help the people. When they went to cases like Area A, they realized the hardships of the people, of the employees. Some of them walked 4 kilometers to come to the bus point to come to work. Therefore, we provided transport to the closest place."

Therefore, facilitating transportation is considered to be vital in order to make employees' lives easier. Further, interviewee #5 proved that certain apparel companies provide transportation to the employees in the apparel industry.

"Apparel company may provide transport to the employees, shuttle buses to some areas."

Because of the support provided by the transport facilities to workers to work without hassles, we considered this theme under the workers' and employees' working condition in the social sustainability dimension.

#### 9.11.4. Theme 24 - Access to Affordable Housing

This theme was included in the Goal 11 on cities and communities. The sample indicator derived from GRI G4 Financial Services Sector Disclosures is "monetary value of products and services designed to deliver a specific social benefit for each business line broken down by purpose" (GRI et al., 2015). However as per the guide

by SDG Compass, this theme covers the SDG target "11.1 By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums". Therefore, we considered this theme in our conceptual framework as to understand how the apparel manufacturing companies were addressing this theme in the supply chain.

Affordable housing is one of the indicators in the social sustainability dimension of SSCM (Venkatesh Mani et al., 2016a). Further, the attention to housing in the socially sustainable supply chains has improved during the last two decades (V. Mani et al., 2015). One of the annual sustainability reports of a leading apparel company addresseed how they have approached this theme as "Offering assistance to those who were badly affected from floods to rebuild their homes" (Brandix, 2011). Further interviewee #1 commented how they were helping the society to have affordable housing;

"So now we do charity and philanthropy activities. We also do big sustainable projects like capacity building. So, from **giving 10,000 LKR to somebody whose roof is leaking** all the way to spending like 5 million LKR on a cancer clinic in Area A hospital."

Further, interviewee #5 also provided evidence saying that bigger apparel companies sometimes even provide housing loan schemes for its employees.

# 9.12. Appendix 12 – Improved Economic Performance (EP)9.12.1. Theme 36 - Economic Performance

This theme is coming under Goal 8 and they discuss the following indicators.

- "Direct economic value generated and distributed"
- "Do the Company's buying practices (e.g., volume of purchase, prices negotiated and paid) impact price volatility of key commodities, materials, crops, and/or inputs that suppliers rely on in local or national markets?"
- "What are the Company's planned investments in the country? In other words, does the Company plan to 1) maintain a similar level of investment in the coming years, 2) increase its investment or volume of trade, or 3) divest or reduce volume of trade with suppliers and distributors? What type of business

model(s) does the company plan to use to invest (e.g. direct investment, contract)? The answer to this question will help assess security of income for suppliers (including smallholders) and workers in the longer term."

"economic performance" is considered as a performance indicator in the apparel supply chain (Gardetti & Subramanian, 2015). Further, the economic performance in the long term is important for any company (Reefke & Mattia, 2013). The companies in very competitive industries prefer economic performance over the social and environmental performances whenever there is a conflict among these performance indicators (Freise & Seuring, 2015). Financial indicators in the economic sustainability mainly cover the monetary valued economic performance which is traditional (Azapagic & Perdan, 2000). However, under economic performance indicators such as "supply chain cost" and "service level" can also be added (Varsei et al., 2014). Therefore, this theme is considered under the economic sustainability dimension.

Since some of the indicators are sensitive towards apparel companies' financial performance, because of the sensitivity of the data, such indicators are not addressed in this research. As majority of the apparel companies in Sri Lanka are privately owned, we did not ask for figures directly, but what's happening all over. This is further proved by the following statements of the interviewee #1.

"Somewhat financial reason for socially sustainable activities are retention of our employees, engagement of our employees and attraction of new employees. When we go to a rural area, we have given some medical maternity clinics. Other people also come there and say "This is done by Company A and my daughter is also working there". That kind of word of mouth expressions. Those are the benefits that we are getting, in terms of branding. There is no direct financial return we can see. It is also from the perspective of the employee. What we want to do is gather employees and do something in return for their betterment."

Interviewee #1 further explains this as;

""Also, we don't do ROI on any of this because it has always been for us social reason for doing it primarily to. Somewhat financial reason for socially sustainable activities are retention of our employees, engagement of our employees and attraction of new employees."

This comment is further approved with the CSR Impact Model presented by (Weber, 2008, p. 250) showing how the non-monetary aspects such as "customer attraction and retention, reputation, and employee recruitment, motivation and retention" are ultimately leading economic success in the companies. Hence, we are considering the following factors under the economic sustainability dimension of our research.

9.12.2. Theme 36.1 - Retention of Employees

9.12.3. Theme 36.2 - Attraction of New Employees

**9.12.4. Theme 36.3 - Improved Image** 

Interviewee #1 comments on the improved image as follows.

"When we go to a rural area, we have given some medical maternity clinics. Other people also come there and say "This is done by Company A and my daughter is also working there". That kind of word of mouth expressions. Those are the benefits that we are getting, in terms of branding."

Interviewee #5 explains the benefit of employee attraction to the company through the improved image.

"Therefore, why not create an environment where people want to come? For example, like company A, there are many people who want to go and work for them. They have such a good reputation. So, it's a reward for the workers to be able to work for such a company."

On the other hand, interviewee #5 reveals a dark secret which comes along with the improved image. That is the clothes being branded.

"There are companies who make clothes very sustainably. But they brand the clothes very high. So, they are not sustainable towards the consumer, what if you can't afford it. They say "now we are green. So, you need to pay us a lot."

As interviewee #5 further mentions there are other reasons for improved images to be pricey.

"Designers who are creating all these sustainable clothing is using their talent. Like the people who do upcycling. Therefore, they are maintaining their own brands and they charge more for their brand and the talent."

# 9.12.5. Theme 36.4 - Attraction of Potential New Customers

Interviewee #1, #2 and #6 agree that with social sustainability dimensions, they expect to attract potential new customers as well.

#### 9.12.6. Theme 36.5 - Customer Retention

Interviewee #1 explains the importance of existing customers.

"Sri Lanka itself always used to differentiate ourselves as a country in the apparel world as an ethical sourcing destination because we couldn't compete on the volumes with China, Vietnam and Bangladesh. There are some customers who are willing to pay a premium for this ethical sourcing. So, in Sri Lanka that is the kind of positioning we had to take because we couldn't give the competitive prices of China or the volumes of China. But what we have is they don't have. I am sure you have read on this. That is whole ethical, our factories are lot better. Even if it's not the big players. Local players in the small garment factories also have the standards which are lot better than in China, you know, like Bangladesh. So, because of that customers like Nike or Victoria Secret they like to come here and get us to manufacture their apparel simply because of this ethical sourcing. That started out like that but it became ethical and sustainable"

This shows that the existing customers want this company to be socially sustainable. On the other hand, for this company to have business, they have to be economic sustainable. In other words, existing customers are important for them to be both socially and economic sustainable.

This argument is further proved by the following comments of the interviewee #5.

"Sri Lanka is exporting these apparel, no? the buyers in other countries are demanding sustainability into a certain extent. Not 100%. But if they find out that some of these clothes are manufactured under unethical conditions, they would not buy them. They would say "I buy whatever my consciousness allows me to buy, but when I find out that these guys are violating the human rights of the staff, under really bad

conditions, I don't want to buy them, I want to buy something else". So, it is a requirement for apparel companies to have at least a basic system which is socially sustainable."

#### **9.12.7. Theme 39 - Employment**

Goal 8 addresses this theme with the following sample indicators.

- "The total number of employees by employment contract and gender"
- "The total number of permanent employees by employment type and gender"
- "The total workforce by employees and supervised workers and by gender"
- "The total workforce by region and gender"
- "Report whether a substantial portion of the organization's work is performed by workers who are legally recognized as self-employed, or by individuals other than employees or supervised workers, including employees and supervised employees of contractors"
- "Average working hours per week (m/w), including overtime"
- "Does the Company system and all major employers along the value chain have policies stating that hiring, placement, remuneration, advancement, training, discipline, retirement, and termination decisions are based on objective factors and are not connected to gender, age, nationality, ethnicity, sexuality, race, colour, creed, caste, language, mental or physical disabilities, etc.? If yes, how are the policies promoted internally by the Company system and each major employer/organization?" related to non-discrimination
- "Total number of permanent vs temporary workers (m/w) along the value chain"
- "Considering contractual workers only, the approximate proportion of those who are employed on an annual basis, on a seasonal basis, on a daily basis, and on a piece/task basis"
- "Total number and rates of new employee hires and employee turnover by age group, gender, and region"

This shows the vastness of the theme "employment" (Roca & Searcy, 2012). And how employment comes under the economic sustainability dimension is discussed under

the theme 36 on economic performance, while its social sustainability dimension is discussed under theme 15 and 38.

#### 9.12.8. Theme 48 - Parental Leave

This comes under the Goal 5 and 8, and addresses the following indicators.

- "Return to work and retention rates after parental leave, by gender"
- "What is the business' policy on maternity, paternity and family leave length and entitlements and to what extent does this go above the statutory provisions in the regulatory regime where the business is operating? Do these policies apply throughout the operations in each country? Are sex-disaggregated statistics kept and tracked?"

Leave for maternity is one of the factors that need to consider in order to make sure that the companies' health and safety code reflects the workers' needs (Ruwanpura, 2014). Further, parental leave comes under the social security (Steen & Palander, 2016).

The interviewees point out that the parental leave is given to the female workers as per the regulations in the law. Therefore, this theme is considered under the social sustainability dimension.

#### 9.12.9. Theme 71 - Foreign Direct Investment

This theme comes under Goal 10 and 17. "Significant indirect economic impacts, including the extent of impacts" is the sample indicator derived from GRI G4 Sustainability Reporting Guidelines.

"Indirect economic impacts can be monetary or nonmonetary, and are particularly important to assess in relation to local communities and regional economies" (Global Reporting Initiative, 2016). Under they discuss "Stimulating, enabling, or limiting foreign direct investment" (Global Reporting Initiative, 2014). Further, "total value of investments in sustainable development" is considered under the economic sustainability dimension in SSCM (Tajbakhsh & Hassini, 2015). And larger infrastructure investment can also lead to larger customer orders in the long term (Huq et al., 2014).

Therefore, this theme relating to increase in investment is considered under economic sustainability dimension of this research.

# 9.12.10. Theme 107 - Improved Profits

Interviewee #1 has the following comment.

"When we go to a rural area, we have given some medical maternity clinics. Other people also come there and say "This is done by Company A and my daughter is also working there". That kind of word of mouth expressions. Those are the benefits that we are getting, in terms of branding. There is no direct financial return we can see. It is also from the perspective of the employee. What we want to do is gather employees and do something in return for their betterment."

But a contrasting comment is given by the interviewee #6 on the profit making in the medium sized apparel company; "profit is the main objective". Since profits are coming under the economic sustainability dimension, we are considering this theme under the economic sustainability dimension.

#### 9.13. Appendix 13 – Rejected Themes

The rejected themes in Phase 1 analysis are as follows.

# 9.13.1. Theme 1 - Availability of Products and Services for those on Low Incomes

Both goal 1 and 10 addressed this business theme. SDG Compass described this theme as "Developing products and services tailored for poor customers (e.g. mobile based money transfer services for unbanked consumers)".

Especially this theme was not common to all types of companies in the apparel industry. For example, this is not related to export apparel manufacturers as they are catering the requirement of the final customer or brand (the focal company). Therefore, this theme was not considered in this conceptual framework.

### 9.13.2. Theme 6 - Electricity Availability and Reliability

This theme was discussed under Goal 7. Electricity availability is very important for the wellbeing of a society. However, enough evidence could not be found relating to the sustainable actions of the apparel manufacturers. Further as SDG Compass depicted this theme falls under a sector specific area addressed by the "electric utility" sector as well. Therefore, we did not consider this theme in our research.

#### 9.13.3. Theme 14 - Indirect Impact on Job Creation

This theme was addressed under the Goal 4 on education. "Assessing the impacts of growth or contraction of the organization on its suppliers/ such as outsourcing of jobs to an overseas location" is the example pointed out in the guide of SDG Compass (GRI et al., 2015). Since we are not taking suppliers into consideration in this research, we ignored this theme.

#### 9.13.4. Theme 22 - Access to Financial Services

This theme fell under "financial sector services" in which the sample indicators were related to that specific sector. Since we could not relate this theme to the apparel industry, we rejected this theme.

#### 9.13.5. Theme 23 - Economic Inclusion

This theme was addressed under Goal 8 and 10. SDG Compass pointed out the following indicator as an example; "Describe policies and practices used to promote economic inclusion when selecting suppliers. Forms of economic inclusion may include: suppliers owned by women; suppliers owned or staffed by members of vulnerable, marginalized or underrepresented social groups; and small and medium sized suppliers" (GRI et al., 2015). As this theme also focused on suppliers, we did not consider this theme in our research.

#### 9.13.6. Theme 28 - Sustainable Buildings

This theme was verisimilar to the theme 25 on "infrastructure investments". This theme was also discussed under Goal 11 and SDG Compass described this as "type and number of sustainability certification, rating and labeling schemes for new construction, management, occupation and redevelopment" under construction sector (GRI et al., 2015). Therefore, this theme was not taken into consideration. However, the sustainable development relating to buildings (e.g. facilitating disabled people) was addressed under a separate theme in the analysis (refer Theme 17).

# 9.13.7. Theme 33 - Physical and Economic Displacement

The indicators suggested in this theme were derived from different sources related to different industries such as GRI G4 Electric Utilities Sector Disclosures, GRI G4 Airport Operators Sector Disclosures, GRI G4 Construction and Real Estate Sector Disclosures, GRI G4 Mining and Metals Sector Disclosures and GRI G4 Oil and Gas Sector Disclosures (GRI et al., 2015).

- "Number of persons voluntarily and involuntarily displaced and/or resettled by development, broken down by project"
- "Operations where involuntary resettlement took place, the number of households resettled in each and how their livelihoods were affected in the process"
- "Sites where resettlements took place, the number of households resettled in each, and how their livelihoods were affected in the process"
- "Approach to managing the impacts of displacement"
- "Stakeholder participation in decision making processes related to energy planning and infrastructure development"
- "Number of persons physically or economically displaced, either voluntary or involuntary, by the airport operator or on its behalf by a governmental or other entity, and compensation provided"

These indicators were discussed in sectors such as construction, real state, oil and gas, mining and metal, electric utilities, and airport operator sectors which take a vast land space. However, we could not find enough evidence to support the link between this theme and apparel industry. Therefore, we did not consider this theme in our framework.

#### 9.13.8. Theme 45 - Jobs Supported in the Supply Chain

This theme considered the "assessing of the impacts of growth or contraction of the organization on its suppliers" (GRI et al., 2015). In other words, this theme focused on supplier relationship. Since we are not considering the suppliers in this research, we rejected this theme.

#### 9.13.9. Theme 51 - Security

"The conduct of security personnel towards third parties is underpinned by their training in human rights, particularly regarding the use of force" was the aspect discussed under this theme (GRI et al., 2015). Since enough evidence was not found relating to this theme it is not considered in this research.

#### 9.13.10. Theme 52 - Socially Inclusive Events

This theme followed the Goal 10 and discussed "type and impacts of initiatives to create a socially inclusive event" under sample indicators (GRI et al., 2015). This indicator was derived from GRI G4 Event Organizers Sector Disclosures. Since this theme discussed specifically under "event organizers" sector and we could not find enough evidence to relate this theme to the apparel industry, we rejected this theme from this research.

# 9.13.11. Theme 55 - Accessibility of Buildings

This theme came under Goal 4 and 10. "Type and number of sustainability certification, rating and labeling schemes for new construction, management, occupation and redevelopment" coming under GRI G4 Construction and Real Estate Sector Disclosures. This theme specifically discusses the construction industry performance. As enough evidence could not find in order to relate this theme to apparel industry, we are not considering this theme in this research.

#### 7. Theme 56 - Accessibility of Events

This theme comes under Goal 10 and the sample indicators are as follows.

- "Significant environmental and socio-economic impacts of transporting attendees to and from the event, and initiatives taken to address the impacts"
- "Type and impacts of initiatives to create an accessible environment"

This comes under GRI G4 Event Organizers Sector Disclosures. Therefore, this theme specifically discusses the operations of event organizers. As enough evidence could not find in order to relate this theme to apparel industry, we are not considering this theme in this research.

#### 8. Theme 57 - Accessibility of Media Content

This theme comes under Goal 10.

Sample indicators are "Actions taken to improve performance in relation to content dissemination issues (accessibility and protection of vulnerable audiences and informed decision making) and results obtained" and "Number and nature of responses (feedback/complaints) related to content dissemination, including protection of vulnerable audiences and informed decision making and accessibility, and processes for addressing these responses" derived from GRI G4 Media Sector Disclosures. This theme specifically discusses the media sector. As enough evidence could not find in order to relate this theme to apparel industry, we are not considering this theme in this research.

#### 9. Theme 58 - Access to Land

This theme specifically discusses "land conversions" and "resettlements". As enough evidence could not find in order to relate this theme to apparel industry, we are not considering this theme in this research.

#### 10. Theme 59 - Air Quality

This theme addresses Goal 3 and 12.

Following are the sample indicators (indicators general to any industry) considered and they are relevant to environmental sustainability dimension. These are derived from GRI G4 Sustainability Reporting Guidelines.

- "Direct greenhouse gas (GHG) emissions"
- "Emissions of ozone-depleting substances (ODS)"
- "Energy indirect greenhouse gas (GHG) emissions"
- "NO<sub>X</sub>, SO<sub>X</sub>, and other significant air emissions"
- "Other indirect greenhouse gas (GHG) emissions"

Air emission is one of the highly mentioned metrics in the Green Supply Chain Management literature (Ahi & Searcy, 2015a; Chardine-baumann & Botta-genoulaz, 2014). Therefore, we are not considering this theme in our research.

### 11. Theme 61 - Cultural Diversity through Media Content

This theme comes under Goal 11.

Sample indicator is "Actions taken to improve adherence to content creation values, and results obtained" derived from GRI G4 Media Sector Disclosures.". As enough evidence could not find in order to relate this theme to apparel industry, we are not considering this theme in this research.

### 12. Theme 62 - Cultural Heritage

This comes under Goal 11.

Sample indicators derived from GRI G4 Electric Utilities Sector Disclosures and GRI G4 Oil and Gas Sector Disclosures are as follows.

- "Approach to managing the impacts of displacement"
- "Operations where involuntary resettlement took place, the number of households resettled in each and how their livelihoods were affected in the process"

This theme specifically discusses displacement and relocation of people due to environmental changes in oil and gas industries. As enough evidence could not find in order to relate this theme to apparel industry, we are not considering this theme in this research.

#### 13. Theme 63 - Deforestation

This theme comes under Goal 15.

The general indicators under this theme are;

- "Has your organization made a commitment to reduce or remove deforestation and forest degradation from your direct operations and/or supply chain?"
- "Please disclose your production and/or consumption data"
- "Please identify which of the following criteria are specifically stated in your organization's commitment to reduce or remove deforestation and forest degradation from your direct operations and/or supply chain"

These indicators have been derived from CDP's 2015 Forests Information Request. Deforestation comes under environmental sustainability dimension of the supply chain (Blowfield, 2003). As this theme comes under environmental dimension, we are rejecting this theme from our research.

# 14. Theme 65 - Electricity Access

This theme comes under Goal 7.

This is discussed under "sector specific" indicators derived from GRI G4 Electric Utilities Sector Disclosures.

- "Average plant availability factor by energy source and by regulatory regime"
- "Average power outage duration"
- "Number of residential disconnections for non-payment, broken down by duration of disconnection and by regulatory regime"
- "Percentage of population unserved in licensed distribution or service areas"
- "Practices to address language, cultural, low literacy and disability related barriers to access and safely use electricity and customer support services"
- "Programs, including those in partnership with government, to improve or maintain access to electricity and customer support services"

As the all above indicators are related to issues need to be addressed by the electric sector or government. There is no connection to apparel industry. However, enough evidence could not find to make this theme relate to the apparel supply chain in Sri Lanka. Therefore this theme is rejected.

#### 15. Theme 66 - Energy Efficiency

This comes under Goal 7,8, 12 and 13.

General indicators are as follows.

- "Energy consumption outside of the organization"
- "Energy consumption within the organization"
- "Energy intensity"
- "Reduction of energy consumption"

- "Reductions in energy requirements of products and services"
- "Please state how much fuel, electricity, heat, steam, and cooling in MWh your organization has purchased and consumed during the reporting year"

Metrics such as "energy efficiency", "energy use" and "energy consumptions" are "environmental focus" (Ahi & Searcy, 2015a). Therefore, we are not considering this theme in our research under social and economic sustainability dimensions.

#### 16. Theme 67 - Environmental Investments

This theme comes under Goals 7,9,12,13,14,15 and 17.

The general indicator "total environmental protection expenditures and investments by type" has been derived from GRI G4 Sustainability Reporting Guidelines.

Since environmental investments are considered under environmental supply chain management (Eneko Igartua, 2014; Wiengarten, Pagell, & Fynes, 2013), we are not considering this theme in the framework.

### 17. Theme 68 - Food Labelling

This is food sector specific theme, and the sample indicators is "policies and practices on communication to consumers about ingredients and nutritional information beyond legal requirements" derived from GRI G4 Food Processing Sector Disclosures. Therefore, we are not considering this in the research.

#### 18. Theme 72 - Forest Degradation

This theme also comes under Goal 15.

The general indicators are;

- "Are you able to compare your Scope 3 emissions for the reporting year with those for the previous year for any sources?"
- "Direct greenhouse gas (GHG) emissions"
- "Does the use of your goods and/or services directly enable GHG emissions to be avoided by a third party?"
- "Energy indirect greenhouse gas (GHG) emissions"

- "Extent of impact mitigation of environmental impacts of products and services"
- "Greenhouse gas (GHG) emissions intensity"
- "How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to the previous year?"
- "NOx, SOX, and other significant air emissions"

This is very much similar to the theme 63 on "deforestation". As this theme also comes under environmental dimension, we are rejecting this theme from our research.

#### 19. Theme 73 - GHG Emissions

This theme comes under Goal 13.

#### General indicators are;

- "Direct greenhouse gas (GHG) emissions"
- "Does the use of your goods and/or services directly enable GHG emissions to be avoided by a third party?"- CDP's 2015 Climate Change Information Request
- "Energy indirect greenhouse gas (GHG) emissions"
- "Extent of impact mitigation of environmental impacts of products and services"
- "Greenhouse gas (GHG) emissions intensity"
- "How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to the previous year?"
- "Other indirect greenhouse gas (GHG) emissions"
- "Please describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tonnes CO2e per full time equivalent (FTE) employee"
- "Reduction of greenhouse gas (GHG) emissions"

These are a few of the sample indicators and the literature shows that "GHG emission" is one of the highly discussed metrics in the Green Supply Chain Management literature (Ahi & Searcy, 2015a). Therefore, we are rejecting this theme from our research.

20. Theme 74 - Genetic Diversity of Farmed and Domesticated Animals

This comes under Goal 2 and 15.

The sample indicator of "Percentage and total of animals raised and/or processed, by species and breed type" is related to food processing sector. Since animal husbandry is not related to apparel industry, we are rejecting this theme.

21. Theme 75 - Indigenous Rights

This comes under Goal 2. "Total number of incidents of violations involving rights of indigenous peoples and actions taken" is the sample performance indicator discussed.

Indigenous rights come under social sustainability dimension (Piecyk & Björklund, 2015). But since the indigenous people are not a part of the apparel industry, this theme is rejected.

22. Theme 76 - Land Remediation

This theme discusses about stopping environmental damage happen in land as per the definition of Cambridge Dictionary ("Cambridge Dictionary," 2017). Therefore, this comes under environmental sustainability dimension and we are not considering this in our research.

23. Theme 77 - Landscapes, Forest Management and Fiber Sourcing

This theme comes under Goal 15. And the indicators are as follows derived from WBCSD Forest Solutions Group KPI.

• "% of all owned, leased and managed forests certified"

• "% of total volume of wood/fiber/products intake certified"

Forest management comes under environmental sustainability dimension (GRI, 2013). We are not considering sourcing in our research. Therefore, this theme is not considered in this research.

24. Theme 78 - Marine Biodiversity

This comes under Goal 14.

General indicators are:

- "Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas"
- "Habitats protected or restored"
- "Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the organization's discharges of water and runoff"
- "Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas"
- "Total number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk"

These are derived from GRI G4 Sustainability Reporting Guidelines.

Biodiversity comes under environmental sustainability (Chardine-baumann & Bottagenoulaz, 2014). Therefore, we are not considering this theme under social and economic sustainability dimension of the apparel supply chain.

# 25. Theme 79 - Materials Efficiency

This theme comes under Goal 8 and 12.

General indicators derived from GRI G4 Sustainability Reporting Guidelines are as follows.

- "Materials used by weight or volume"
- "Percentage of materials used that are recycled input materials"

Less material usage is important for green supply chain (Milano, 2014). Therefore, we are not considering this theme under social and economic sustainability dimension of the apparel supply chain.

# 26. Theme 80 - Materials Recycling

This comes under Goal 12.

"Percentage of materials used that are recycled input materials" is the sample indicator from GRI G4 Sustainability Reporting Guidelines.

Since recycling comes under environmental sustainability (Ahi & Searcy, 2015a) we are not considering this theme in our research.

# 27. Theme 81 - Media Literacy

Goal 4

Sector specific indicator "Actions taken to empower audiences through media literacy skills development and results obtained" derived from GRI G4 Media Sector Disclosures. Since this is not related to apparel supply chain, we are rejecting this theme.

# 28. Theme 82 - Mountain Ecosystems

This theme comes under Goal 15.

General indicators are;

- "Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas"
- "Habitats protected or restored"
- "Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas"
- "Total number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk"

Since eco systems are addressing the environmental sustainability dimension (Chardine-baumann & Botta-genoulaz, 2014), we are not considering this theme in our research.

# 29. Theme 83 - Natural Habitat Degradation

This theme is considered under Goal 15.

General indicators are;

- "Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas"
- "Habitats protected or restored"
- "Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the organization's discharges of water and runoff"
- "Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas"
- "Total number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk"

Similar to the previous theme, habitat degradation comes under environmental sustainability dimension (Aref A. Hervani Marilyn M. Helms Joseph Sarkis, 2005; Joung, Carrell, Sarkar, & Feng, 2012; Narayanamurthy & John, 2015; Nurul, Wan, Brito, & Tavasszy, 2016; Palme, 2011). Therefore, this theme is rejected.

#### **30.** Theme **84** - Noise

This theme comes under Goal 11.

The sample indicator "Number and percentage change of people residing in areas affected by noise" is related to aviation sector derived from GRI G4 Airport Operators Sector Disclosures. As this is environmental sustainability related (Chardine-baumann & Botta-genoulaz, 2014), we are rejecting this theme in this research.

#### 31. Theme 85 - Ocean Acidification

This comes under Goal 14.

General indicators are derived from GRI G4 Sustainability Reporting Guidelines and CDP's 2015 Climate Change Information Request.

- "Direct greenhouse gas (GHG) emissions"
- "Does the use of your goods and/or services directly enable GHG emissions to be avoided by a third party?"

- "Energy indirect greenhouse gas (GHG) emissions"
- "Extent of impact mitigation of environmental impacts of products and services"
- "Greenhouse gas (GHG) emissions intensity"
- "How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to the previous year?"
- "NOx, SOX, and other significant air emissions"
- "Other indirect greenhouse gas (GHG) emissions"
- "Please account for your organization's Scope 3 emissions, disclosing and explaining any exclusions"
- "Please describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tonnes CO2e per full time equivalent (FTE) employee"
- "Please identify the total number of projects at each stage of development, and for those in the implementation stages, the estimated CO2e savings"
- "Reduction of greenhouse gas (GHG) emissions"

Similar to the theme 73 on "GHG emissions", we are rejecting this theme from our research as this theme covers one of the "planetary boundaries" coming under the environmental sustainability dimension (Roos et al., 2016).

#### 32. Theme 87 - Procurement Practices

Since we are not looking into supplier's aspect of the focal company, we are ignoring this theme.

# 33. Theme 89 - Renewable Energy

This comes under Goal 7.

General indicators are "Energy consumption outside of the organization" and "Energy consumption within the organization" derived from GRI G4 Sustainability Reporting Guidelines.

Energy consumption (Ahi & Searcy, 2015a) and finding alternative energy sources (Chardine-baumann & Botta-genoulaz, 2014) come under environmental sustainability dimension. Therefore, this is not considered in this research.

#### 34. Theme 90 - Resource Efficiency of Products and Services

Goal 8 and 12

General indicators derived from GRI G4 Sustainability Reporting Guidelines are;

- "Extent of impact mitigation of environmental impacts of products and services"
- "Percentage of products sold and their packaging materials that are reclaimed by category"

Resource efficiency looks into the environmental sustainability dimension of a supply chain (Wang, 2014; Zhou, 2009). Therefore, we are rejecting this theme in our research.

# 35. Theme 91 - Responsible Content Dissemination

Goal 3 and 16

Sector specific indicators derived from GRI G4 Media Sector Disclosures are discussed here.

- "Actions taken to improve performance in relation to content dissemination issues (accessibility and protection of vulnerable audiences and informed decision making) and results obtained"
- "Number and nature of responses (feedback/complaints) related to content dissemination, including protection of vulnerable audiences and informed decision making and accessibility, and processes for addressing these responses"

As enough evidence could not find to relate this theme to apparel industry, we are rejecting this theme.

# 36. Theme 92 - Responsible Finance

Goal 10

Sector specific indicators derived from GRI G4 Financial Services Sector Disclosures are discussed here.

- "Coverage and frequency of audits to assess implementation of environmental and social policies and risk assessment procedures"
- "Interaction with clients/investees/business partners regarding environmental and social risks and opportunities"
- "Percentage and number of companies held in the institution's portfolio with which the reporting organisation has interacted on environmental or social issues"
- "Percentage of assets subject to positive and negative environmental or social screening"
- "Policies for the fair design and sale of financial products and services"
- "Policies with specific environmental and social components applied to business lines"
- "Procedures for assessing and screening environmental and social risks in business lines"
- "Process(es) for improving staff competency to implement the environmental and social policies and procedures as applied to business lines"
- "Processes for monitoring clients' implementation of and compliance with environmental and social requirements included in agreements or transactions"

As enough evidence could not find to relate this theme to apparel industry, we are rejecting this theme.

# 37. Theme 93 - Risks and Opportunities due to Climate Change

#### Goal 13

The following are the indicators discussed under this theme and they are derived from UN Global Compact-Oxfam Poverty Footprint, GRI G4 Sustainability Reporting Guidelines and CDP's 2015 Climate Change Information Request.

• "Do the Company's operations pose a risk of environmental disasters (e.g. drought, contamination, etc.)? If yes, does the Company engage with communities to mitigate and manage these environmental risks on local communities? If yes, provide details, such as the practices or programs in place, objectives and targets)."

- "Does the Company engage in initiatives that promote resilient practices and/or upgrade value chain procedures in order to address climate change? If yes, do the initiatives extend to stakeholders outside the value chain (e.g., surrounding communities and smallholders)?"
- "Does the Company system engage with commercial partners and/or smallholders to understand the impacts of climate change on suppliers and the supply chain? If yes, provide details on the engagement."
- "Does the Company system promote climate resilient practices within its business relationships? If yes, do these practices extend to smallholders (where applicable)? If yes, provide details on practices, including objectives."
- "Financial implications and other risks and opportunities for the organization's activities due to climate change"
- "Have you identified any inherent climate change opportunities that have the
  potential to generate a substantive change in your business operations, revenue
  or expenditure?"
- "i) Proportion of the smallholders interviewed (m/w) who indicate they are experiencing impacts of climate change (e.g., extreme weather conditions and/or changing conditions in rainfall or temperature). ii) Provide details on how MSMEs and/or smallholders interviewed perceive the effects of climate change, how they are coping with the changes, and the main challenges they are facing."

Issue of climate change comes under environmental sustainability dimension (Carter & Easton, 2011; Palme, 2011; Srinivas Nowduri, 2014). Therefore, we are not considering this theme in our research.

# 38. Theme 95 - Spills

Spills come under Goal 3,6,12,14 and 15.

"Total number and volume of significant spills" is the sample indicator derived from GRI G4 Sustainability Reporting Guidelines.

Since spills are an impact on environmental sustainability (Chardine-baumann & Botta-genoulaz, 2014), we are not considering this theme in our research.

#### 39. Theme 96 - Sustainable Sourcing

Since we are not looking into suppliers, we are no considering this theme.

#### 40. Theme 97 - Sustainable Tourism

This theme discusses a separate industry; therefore, we are not considering this theme in our research.

#### 41. Theme 98 - Sustainable Water Withdrawals

This comes under Goal 6.

The following indicators are derived from the following sources.

- "Average water intensity in water-stressed or water-scarce areas"- CEO Water Mandate's Corporate Water Disclosure Guidelines
- "Does the Company system have procedures or systems in place to help reduce its footprint on water? (for instance, seeking alternative water sources, such as grey water or rainwater capture systems)?"- UN Global Compact-Oxfam Poverty Footprint
- "Extent of impact mitigation of environmental impacts of products and services"- GRI G4 Sustainability Reporting Guidelines
- "Location-specific data: Water withdrawals by source type"- CEO Water Mandate's Corporate Water Disclosure Guidelines
- "Total water withdrawal by source"- GRI G4 Sustainability Reporting Guidelines
- "Water performance in the value chain"- CEO Water Mandate's Corporate Water Disclosure Guidelines
- "Water sources significantly affected by withdrawal of water"- GRI G4
   Sustainability Reporting Guidelines
- "Water withdrawals: for the reporting year, please provide total water withdrawal data by source, across your operations"- CDP's 2015 Water Questionnaire

"Water sources significantly affected by withdrawal of water" is an "environmental performance indicator" (Altmann, 2014). Therefore, we are not considering this theme in our research.

# 42. Theme 100 - Terrestrial and Inland Freshwater Ecosystems

This theme comes under Goal 15.

Based on GRI G4 Sustainability Reporting Guidelines, the following indicators are identified under this theme.

- "Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas"
- "Habitats protected or restored"
- "Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the organization's discharges of water and runoff"
- "Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas"
- "Total number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk"

As eco systems are coming under environmental sustainability dimension (Chardine-baumann & Botta-genoulaz, 2014), this theme is also rejected.

### 43. Theme 101 - Waste

Waste comes under Goal 3.6 and 12.

The general indicators derived from GRI G4 Sustainability Reporting Guidelines are as follows.

- "Extent of impact mitigation of environmental impacts of products and services"
- "Total weight of waste by type and disposal method"

• "Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally"

As waste (both water waste and solid waste) is an issue related to environmental sustainability dimension in the supply chain (Ahi & Searcy, 2015a), we are not considering this theme.

#### 44. Theme 102 - Water-Related Ecosystems and Biodiversity

This also comes under Goal 6.

The following are the indicators based on GRI G4 Sustainability Reporting Guidelines.

- "Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas"
- "Habitats protected or restored"
- "Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the organization's discharges of water and runoff"
- "Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas"
- "Total number and volume of significant spills"
- "Total number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk"
- "Total water discharge by quality and destination"

Similar to theme 100 on eco systems, biodiversity also comes under environmental sustainability dimension (Chardine-baumann & Botta-genoulaz, 2014). Therefore, this theme is not considered in this research.

#### 45. Theme 103 - Water Discharge to Oceans

#### Goal 14

The following indicators are considered here based on CEO Water Mandate's Corporate Water Disclosure Guidelines, GRI G4 Sustainability Reporting Guidelines and CDP's 2015 Water Questionnaire.

- "Location-specific data: Water discharge by destination"
- "Total water discharge by quality and destination"
- "Water discharges: for the reporting year, please provide total water discharge data by destination, across your operations"

Hence this theme is related to social sustainability dimension, we are rejecting this theme.

# 46. Theme 104 - Water Efficiency

This comes under Goal 6, 8 and 12.

Following are the indicators based on CEO Water Mandate's Corporate Water Disclosure Guidelines, GRI G4 Sustainability Reporting Guidelines, CDP's 2015 Water Questionnaire and WASH Pledge and Guiding Principles for Implementation.

- "Location-specific data: Water consumption"
- "Location-specific data: Water intensity"
- "Percentage and total volume of water recycled and reused"
- "Water consumption: for the reporting year, please provide total water consumption data, across your operations"
- "Water performance in the value chain"
- "Number of premises under direct control where water saving technologies and water saving awareness campaign are employed in areas facing water scarcity or water stress"

Since water consumption comes under environmental focus in the supply chain (Ahi & Searcy, 2015a), we are rejecting this theme from our research.

# 47. Theme 105 - Water Quality

Theme on "water quality" belongs to Goal 3, 6 and 12.

CEO Water Mandate's Corporate Water Disclosure Guidelines and GRI G4 Sustainability Reporting Guidelines are the sources for following sample indicators.

- "Percent of facilities adhering to relevant water quality standard(s)"
- "Water performance in the value chain"
- "Total water discharge by quality and destination"

Water quality comes under the environmental sustainability dimension (Feng, Li, Duan, & Zhang, 2007). Therefore, we are not considering this in our research.

# 48. Theme 106 - Water Recycling and Reuse

This comes under Goal 6 and "Percentage and total volume of water recycled and reused" is the indicator coming under GRI G4 Sustainability Reporting Guidelines.

Recycling and reuse come under environmental sustainability dimension (Ahi & Searcy, 2015a; Chardine-baumann & Botta-genoulaz, 2014). Therefore, we are not considering this theme in our research.

# 9.13.12. Relationship between Social and Economic Sustainability Dimensions

As interviewee #3 describes;

"We calculate the number of hours we spent in training and evaluate the cost. Normally we calculate monthly how many hours for training, how many hours for lunch and other breaks during the training. We have to calculate the ROI."

"The number of visits to the medical room and the medical cost (the costs of tablets and Panadol etc.). we are trying to maintain these in a lower level. And also, we calculate the knowledge, happiness and the satisfaction level. At the end of the day, all these things are linked to the financial measures"

However, as the interviewee #1 mentions their company is not looking that much into financial figures.

"Also, we don't do ROI on any of this because it has always been for us social reason for doing it primarily to. Somewhat financial reason for socially sustainable activities are retention of our employees, engagement of our employees and attraction of new employees."

This depicts that the understanding of the relationship between economic and social sustainability is very lacking and it is an area needs to be improved.

# 9.14. Appendix 3 - The Survey Questionnaire

# 9.14.1. Effect of Economic and Social Aspects in Sustainable Supply Chain Management in Apparel Industry

I am a full time postgraduate research student reading for the Master of Science in Supply Chain Management in the Department of Transport & Logistics Management, Faculty of Engineering, University of Moratuwa. Currently I'm carrying out a survey on above topic where the focus is on studying the relationship between social and economic dimensions of sustainability aspects in the Sri Lankan apparel industry.

This survey aims to find about:

- Social aspects considered in the Sustainability Dimension of Apparel Supply Chain in Sri Lanka and;
- Economic aspects considered in the Sustainability Dimension of Apparel
   Supply Chain in Sri Lanka

All the information collected from this survey will be used only for academic purposes and will be treated as strictly confidential.

I recognize the value of your time and gratefully appreciate your efforts in completing this questionnaire. For additional information about this survey, please do not hesitate to contact me (jayaishsudu@gmail.com).

- 1. To which category does your company belong to?
  - SME
  - Large scale
- 2. What is the business type of your company?
  - Apparel exporting company
  - Local Apparel Manufacturer
  - Both

- 3. What is your position in the company?
  - Top Level management
  - Middle Level management
  - Operational Level Management
- 4. Please mark to which extent you agree with the following actions of your company (these actions can be directed either towards the company employees or society or both).

	Strongly	Disagree	Agree	Strongly
	Disagree	Disagree		Agree
Company conducts social sustainability				
practices to ensure the benefits towards				
the society.				
Company provides education, training				
and skill development opportunities to				
employees.				
Company acts towards equity				
improvement (e.g. non-discriminatory				
actions within the company, ensuring				
diversity and providing equal				
opportunities etc.)				
Company promotes gender related equity				
improvement (e.g. women are promoted				
to be leaders, gender equality is promoted,				
women empowerment actions etc.)				
Company conducts ethical improvement				
practices (e.g. working against corruption,				
ethical bahvior etc.)				

	Strongly Disagree	Disagree	Agree	Strongly Agree
Company works towards health and safety improvement (e.g. provides access to clean water and good food, Occupation Health and Safety concerns are addressed etc.)				
Company ensures improves labor conditions (e.g. act against workplace violence, freedom of collective bargaining, good labor/management relations etc.)				
Company acts against child and forced labor				
Company acts understanding the regulatory responsibilities (e.g. accountable and transparent governance of the company, compliance to laws and regulations in the industry and country etc.)				
Company provides improves wages and benefits (e.g. good wages and benefits to the employees and workers, equal remuneration etc.)				
Company ensures better working conditions for employees and workers (e.g. childcare facilities, sustainable				

	transport facilities, housing options are provided)  Company ensures the economic performance (e.g. by higher retention of employees, higher attraction of new employees, good image, attraction of new customers etc.)	Strongly Disagree	Disagree	Agree	Strongly Agree
	Requirement fulfilled	by the com	pany		
		- 5 110 00111			
1	Company provides emergency relief during disasters (e.g. during floods, draughts)				
2	Company provides access to healthy, nutritious and affordable food along with safe drinking water and sanitation facilities.				
3	Company provides opportunities for affordable housing				
4	Company provides transportation facilities to the employees  (E.g. Employees are provided with staff transport, The company promotes less energy intensive transport modes such as train travel over private vehicle usage among the employees)				

		Strongly Disagree	Disagree	Agree	Strongly Agree
5	Company provides affordable and safe childcare services to employees				
	Law and E	thics			
6	Company takes actions against corruption  (E.g. The company does communication and training on anti-corruption policies and procedures. The company publicly states it will work against corruption in all its forms, including bribery and extortion.)				
7	Company complies with laws and regulations in the industry  (E.g. The company has reduced the likelihood of groundwater contamination by treating and processing all waste with exceptional precaution, according to local and federal guidelines)				
8	Company has an effective, accountable and transparent governance  (E.g. Conflicts of interest are avoided and managed, the company is obliged and responsible to give an explanation or reason for the company's actions and conduct- company has no complaints regarding breaches of customer privacy and losses of customer data, a willingness				

		Strongly	Discourse	A	Strongly
		Disagree	Disagree	Agree	Agree
	by the company to provide clear				
	information to shareholders and other				
	stakeholders)				
	,				
	The company sticks to ethics in its				
	business practices.				
	(E.g. The company has values, principles,				
	standards and norms of behavior such as				
9	codes of conduct and codes of ethics,				
	internal and external mechanisms for				
	reporting concerns and seeking advice				
	about unethical or unlawful behavior and				
	make these policies into work)				
	Health, Sanitatio	n & Safety			
	The company provides hygiene training				
	and awareness along with sanitary				
	facilities to its employees and the society.				
	(E.g. Women employees and women in				
10	the community are given access to				
	reproductive health services, Employees				
	have access to free and voluntary HIV				
	testing (either through their employer or				
	public/community health systems).				
	The company commits to invest in health				
	infrastructure-related charity projects and				
11	capable of explaining the rationale behind				
	that investment.				
	mai myesimem.				

		Strongly Disagree	Disagree	Agree	Strongly Agree
	The company has occupational health and				
	safety policies and/or procedures and				
	comply with the highest industry				
	standards.				
	(E.g. The company system monitors				
	health impacts on the workforce - type of				
	injury and rates of injury, occupational				
	diseases, lost days, and absenteeism, and				
13	total number of work-related fatalities				
	etc., Workers are given access to Personal				
	Protective Equipment (PPE) and training				
	on its appropriate use and they use,				
	Workforce is represented in formal joint				
	management-worker health and safety				
	committees that help monitor and advise				
	on occupational health and safety				
	programs)				
	Education and	Training			
	The company provides opportunities for				
15	employees and their children to continue				
	their education.				
	Company holds programs and processes				
16	to ensure the availability of a skilled				
	workforce (e.g. on the job training)				
	Company provides opportunities to				
17	improve employees' other skills (e.g.				
	opportunities for entrepreneurships,				

		Strongly Disagree	Disagree	Agree	Strongly Agree
	learning English, obtaining driving license)  The company takes sustainability initiatives to raise awareness, share knowledge and influence behavioral change, and has achieved results.  (E.g. The company educates employees	Disagree			Agree
18	and consumers on the importance of using water efficiently, raises consumer awareness on effective ways to properly dispose of their waste to discourage littering and promote responsible behavior, educates consumers about sustainable consumption by developing innovative solutions which can reduce energy need in usage, transfers knowledge on best practice, and lessons learned)				
	Equalit	y			
19	The company has policies/programs promoting equal opportunities.  (E.g. Company has policies stating that hiring, placement, remuneration, advancement, training, discipline, retirement, and termination decisions are based on objective factors and are not				

		Strongly Disagree	Disagree	Agree	Strongly Agree
	connected to gender, age, nationality, ethnicity, sexuality, race, colour, creed, caste, language, mental or physical disabilities, etc.)				
20	The company encourages employees to share or participate in organizational decision-making.  (E.g. The company recognizes the right to freedom of association and the right of its workers to collectively bargain - to join any trade union)				
21	Company considers equal remuneration for women and men  (e.g. Company gives explanation of source, nature and likely causes of any differences between women's and men's pay within the business)				
22	The company has a clear-cut, well-publicized policy of zero tolerance towards gender-based violence and harassment occurring in and around the workplace.  (E.g. Sexual harassment, violence while traveling to workplace, including while carrying out livelihood tasks such as collecting water and firewood, alcohol-				

		Strongly Disagree	Disagree	Agree	Strongly Agree
	related violence, Company has a confidential complaint procedure to address this)				
	Gender Equ	iality			
23	Company does not favor for the gender when making decisions  (E.g. All the employees receive regular performance and career development reviews)				
24	The company has taken corrective actions during the incidents of discrimination.  (E.g. Number of grievances about human rights impacts filed, addressed, and resolved through formal grievance mechanisms)				
25	Company gives opportunities for women to climb up the career ladder  (E.g. Women employees are comfortable voicing their opinions about any unequal treatment in the company. Company gives opportunity to the representation of women in management positions, skilled positions, unskilled positions, trade unions, workers' committee and/or associations of the company)				

26	Company empowers women through technology  (e.g. Company provides information and communication technology knowledge for women)	Strongly Disagree	Disagree	Agree	Strongly Agree
	Labor Poli	cies			
27	Company has taken measures to contribute to the effective abolition of child labor  Company has taken measures to contribute to the effective abolition of				
28	forced or compulsory labor. (Forced or compulsory labor is any work or services which people are forced to do against their will under the threat of some form punishment)				
29	Company has aligned its policy/code that addresses labor rights and standards along the value chain.  (E.g. The company aligns with the customer requirement related to labor practices, demonstrates consistent practices for informing and/or training workers on their rights under national labour and employment law, Company labour practices have created significant				

	actual and potential negative impacts in	Strongly Disagree	Disagree	Agree	Strongly Agree
	the supply chain and taken actions to mitigate them)				
	Other social :	aspects			
30	Company builds partnerships to improve social sustainability  (E.g. The company is working with other groups such as governments, community groups, peer companies and NGOs to improve local water governance or on water projects to address identified challenges)				
31	The company develops quality, reliable, sustainable and resilient infrastructure to support economic development and human well-being.  (E.g. Company invests in water and sanitation projects or infrastructure in under-served regions. When developing their own factories, they consider accessibility of disabled people, company building wells and tanks in the neighborhood, Company invests in water treatment so that municipal treatment facilities are not overburdened by industrial waste-water, Company invests				

		Strongly Disagree	Disagree	Agree	Strongly Agree
		Disagree			Agree
	in natural infrastructure as a cost- competitive alternative to grey infrastructure.)				
	Company encourages innovation and research related to social sustainability				
32	(E.g. The company implement product portfolio analysis tools to understand social footprint of products within lifestyles as well as production. Innovations of the company align products and applications to appropriately address sustainability mega trends. Company invests in R&D related to sustainable energy services, bringing new technologies to the market quickly to make living better. Establish standards and promote regulation that ensure company projects and initiatives are sustainably managed.)				
	Economic g	rowth			
33	Company image has been improved through social activities				
34	Company profits have been increased through social activities				
	Employment opp	portunities			

		Strongly Disagree	Disagree	Agree	Strongly Agree			
35	Potential employees are highly attracted to the company compared to other companies in the industry							
36	Company's employee turnover is low compared to other companies in the industry							
37	More youth is attracted to the jobs in the company							
38	Employee engagement is encouraged.  (Employees happily join with the company's social initiatives with an aim of giving back to society e.g.  Volunteering work)							
Customer Base								
39	New customers are attracted to the company compared to other rival companies in the industry							
40	Existing customers are happy with the company's socially sustainable approach							
Economic productivity								
41	Company is planning to increase its investment or volume of trade							
42	Company negotiates wage and benefits standards through collective agreement							

		Strongly Disagree	Disagree	Agree	Strongly Agree
	along the value chain (e.g. Minimum wages along the value chain)				
43	Full time, part time and temporary employees are satisfied with the benefits provided by the company				