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The India Story: Impact of Private Sustainability Standards on Market Access and Sustainable Development

Abstract

The booming of over 500 private sustainability standards (PSS) in 199 countries and 25 industrial sectors, the PSS system, involving testing, inspection and certification procedures across all market sectors that apply to samples, products, services, management systems or personnel, is the testament to PSS now becoming the new market reality as a tool for sustainable supply-chain management, marketing and competitiveness. In India, PSS are seen to compete with the national regulatory institutions in defining the mandate for safety and quality. Therefore, in addition to mandatory regulations, voluntary measures affecting market access of Indian products require close consideration.

Costs of compliance with eco-labelling criteria in the numerous sectors have been found to be prohibitive, compounded by difficulties in accessing technologies, developing testing facilities and verifying compliance. However, PSS do take steps towards ensuring long term sustainability of value chains and prepares the national market for rising consumer awareness and demand for product & environmental safety, livelihood improvement of workers, together with improving competitiveness of industries, production practices of the fast-growing smallholder segment, and mainstreaming smallholders into the sustainability fold.

This study attempts to fuel these efforts by understanding the PSS ecosystem in India through the following key questions: (i) Why we discuss that Private Sustainability Standards (PSS) may have significant impact upon India's trade success and sustainable development? (ii) Which product groups are the key priority groups for this study? What is the rationale for the selection? This study identifies three (3) priority product groups (PPGs), provide justification for doing so in the Indian context, and then move to understanding the PSS implications in their market by understanding taking specific approached to the PPGs as best suit them. The PPGs chosen (and later substantiated) include agri-food (tea & grapes), forestry (handicrafts) and textile.

The study aims to assess the role and contribution of PSS, if any, to India's trade, and analyse if PSS have an impact to achieve sustainable development. It further explores the role of accreditation and certification bodies for operationalisation of the PSS in the Indian context. The study goes on to highlight the positive social, economic and environmental impacts that PSS might have on the society and business ecosystem, the benefits of certification, and the increased endorsement of the sustainability standards system by government mechanisms, statutory entities, and policy initiatives in an India which is yet wary of them as potential technical barriers to trade.

The study also observes that PSS have proved to be a boon in some sectors as they have connected the local populace and the agriculture commodities directly to the global value chains. The study recognises the importance of trade as a measure of implementation of the SDGs and highlights the role of MSMEs in this process.

Key words: Accreditation, Certification, Trade, Export Promotion, Food Safety, Agriculture, Multi stakeholder committee, Mutual recognition agreements, Private Sustainable Standards, Standard, Sustainability, Sustainable Development Goals, Voluntary Sustainability Standard, SPS, TBT

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Executive summary

This is a study that has been commissioned by the United Nations Conference on Trade and Development (UNCTAD) for understanding the impact of private sustainability standards (PSS) on market access and sustainable development in India.

With almost 500 private sustainability standards (PSS) in 199 countries and 25 industrial sectors, the PSS system, involving testing, inspection and certification procedures across all market sectors which apply to samples, products, services, management systems or personnel, has become the new market reality as a tool for sustainable supply-chain management, marketing and competitiveness. In India, PSS are seen to compete with the national regulatory institutions in defining the mandate for safety and quality. Therefore, in addition to mandatory regulations, voluntary measures affecting market access of Indian products require close consideration. Costs of compliance with eco-labelling criteria in the numerous sectors have been found to be prohibitive, compounded by difficulties in accessing technologies, developing testing facilities and verifying compliance.

However, PSS do take steps towards ensuring long term sustainability of value chains and prepares the national market for rising consumer awareness and demand for product & environmental safety, livelihood improvement of workers, together with improving competitiveness of industries, production practices of the fast-growing smallholder segment, and mainstreaming smallholders into the sustainability fold. Besides existing international standards such as SA-8000, GOTS, Forest Management & Chain of Custody (FSC), Better Cotton, etc., India itself has responded to the development of standards in the form of voluntary standards such as Trustea, INDGAP, ZED, Voluntary Certification Scheme for AYUSH Products, Readymix Concrete Plant, Lead Safe Paints, and Medicinal Plant Produce. These have shown a promising way in India for development of private and voluntary standards, thereby achieving quality production along with introducing sustainability in process both in food and non-food sector.

Keeping this emerging PSS ecosystem in mind, India could unlock the full potential of attracting international investment and business if it prepares adequately and is able to prove its commitment and alignment to sustainability, with special emphasis on corporate sustainability and responsibility. This study attempts to fuel these efforts by understanding the PSS ecosystem in India through the following key questions: (i) Why we discuss that Private Sustainability Standards (PSS) may have significant impact upon India's trade success and sustainable development? (ii) Which product-groups are the key priority groups for this study? What is the rationale for the selection?

PSS are unique to products and sectors, and to that extent, it is necessary to deal with them in somewhat neat groups of products in which they operate and endeavour to integrate sustainability in their process chains. Therefore, this study will identify three (3) priority product groups (PPGs), provide justification for doing so in the Indian context, and then move to understanding the PSS implications in their market by understanding taking specific approached to the PPGs as best suit them. The PPGs chosen (and later substantiated) include agri-food (tea & grapes), forestry (handicrafts) and textile.

The study aims to assess the role and contribution of PSS (with focus on the PPGs), if any, to India's trade, and analyse if PSS have an impact to achieve sustainable development. It further explores the role of accreditation and certification bodies for operationalisation of the PSS in the Indian context. The study goes on to highlight the positive social, economic and environmental impacts that PSS might have on the society and business ecosystem, the benefits of certification, and the increased endorsement of the sustainability standards system by government mechanisms, statutory entities, and policy initiatives in an India which is yet wary of them as potential technical barriers to trade. While doing so, the endeavor learns from the good practices being followed in similar areas across the world and highlight them wherever necessary. The study also observes that PSS have proved to be a boon in some sectors as they have connected the local populace and the agriculture commodities directly to the global value chains.

The study also puts forth that it is essential for businesses to imbibe sustainability in their DNAs and governments must create conditions for ensuring this result. The study recognises the importance of trade as a measure of implementation of the SDGs and highlights the role of MSMEs in this process. It's essential, therefore, to address the issues of duplication, accountability, traceability, legitimacy and costs in the implementation of PSS so that MSMEs can more extensively utilize the benefits of the same.

In conclusion, this study will be an input to the Steering Committee (SC) and the Multi-Stakeholder Committee (MSC) of the India National Platform on Private Sustainability Standards. They function as forums for exchange of views on key PSS issues among Indian PSS stakeholders. The SC and MSC include members from the government, statutory agencies, commodity boards, private stakeholders, industry associations, consumer bodies, and any other non-governmental institution as deemed fit by the Secretariat and the Charter of the Platform. The study will support deliberations in the Committee and strengthen the Committee's work.

1. Introduction

This is a study that has been commissioned by the United Nations Conference on Trade and Development (UNCTAD), on behalf of the United Nations Forum on Sustainability Standards (UNFSS)¹, for understanding the impact of private sustainability standards on market access and sustainable development in India. Private sustainability standards (PSS) are unique to products and sectors, and to that extent, it is necessary to deal with them in somewhat neat groups of products in which they operate and endeavour to integrate sustainability in their process chains. Therefore, this study will identify three (3) priority product groups (PPGs), provide justification for doing so in the Indian context, and then move to understanding the PSS implications in their market by understanding taking specific approached to the PPGs as best suit them. However, before indulging in this exercise, it is required to establish the definitions to be used in the study, the Indian context and relevance – with due focus on its governmental policies – which would be the constant backdrop in which one must read this work, the genesis and goals of the study, and objective biases, if any, of the author of the study.

This study will be an input to the Steering Committee (SC) and the Multi-Stakeholder Committee (MSC) of the India National Platform on Private Sustainability Standards. They function as forums for exchange of views on key PSS issues among Indian PSS stakeholders. The SC and MSC include members from the government, statutory agencies, commodity boards, private standard owners, industry associations, producers, consumer bodies, and any other non-governmental institution as deemed fit by the Secretariat and the Charter of the Platform. The study will support deliberations in the Committee and strengthen the Committee's work.

1.1 Definitions and Terminologies

We initiate with defining and understanding the term 'standard' in the context and for the purposes of this study.

1.1.1 Standard

A standard is an agreed way of doing something² – be it manufacturing a product, managing a process, delivering a service or supplying materials. Standards are essentially documents that provide requirements, specifications, guidelines or characteristics used to ensure that materials, products, processes and services are consistently fit for their purposes³, and are safe and reliable. The World Trade Organization (WTO) definition of a standard is provided by the Agreement on Technical Barriers to Trade (TBT) as a document

'Approved by a recognized body, that provides, for common and repeated use, rules, guidelines or characteristics for products or related processes and production methods, with which compliance is not mandatory. It may also include or deal exclusively with terminology, symbols, packaging, marking or labelling requirements as they apply to a product, process or production method'⁴

¹ "UNFSS is a joint initiative of the UN system which brings together the 5 United Nations agencies that deal with different aspects of sustainability standards: the Food and Agriculture Organization of the United Nations (FAO), the International Trade Centre (ITC), the United Nations Conference on Trade and Development (UNCTAD), the United Nations Environment Programme (UNEP) and the United Nations Industrial Development Organization (UNIDO)".

² BSI, What is a standard?, available at: https://goo.gl/GgqMlq, retrieved: 14 January 2017.

³ ISO, *Standards*, available at: http://www.iso.org/iso/home/standards.htm, retrieved: 14 January 2017.

⁴ Paragraph 1(2), Annex 1, Agreement on Technical Barriers to Trade (TBT), WTO, 1995.

1.1.1.1 Objectives of standards

Standards have different levels of objectives, ranging from the ultimate objective to the more operational and immediate objectives. The ultimate objective relates to the strategic goal that the organization aims to achieve by prescribing the standard.⁵ They are based on industrial, scientific and consumer experience and are regularly reviewed to ensure they keep pace with new technologies. They cover everything from consumer products and services, construction, engineering, business, information technology, human services to energy and water utilities, the environment and much more.⁶ Standards may be voluntary or mandatory, in which case, they become regulation.

1.1.1.2 Approach towards standards

Technical regulations and standards, that usually vary from country to country, are considered important tools for global trade. However, it is realized that the proliferation of different standards and technical regulations leads to hardships faced both by the producers and the exporters. Research⁷ based on empirical literature analysing the relationship between standards and trade flows at the import and export level tend to show the standoff between perspectives: "standards-as-barriers" and "standards-as-catalysts".

Evidence comes from macro-economic trade models that estimate the impact of increasing standards, usually public standards, on international trade flows. This literature is said to be pointing to trade enhancing impact of standards, even if overall results remain ambiguous. Some authors⁸ find that standards are a significant source of trade restrictiveness for middle- and low-income countries, while others⁹ indicate that standards have no impact at all on exports from developing countries.

1.1.1.3 Voluntary v. private - the terminology conundrum

Standards may be made/set by public or private entities. Private standards differ from public ones since they are not prepared by regulatory authorities, but instead by nongovernmental entities. Numerous publications on standards have often confused the terms 'private standards' and 'voluntary standards', and have used them as synonyms for each other. Voluntary standards are those that are not mandatory¹⁰, however, these need not necessarily be privately created. Public authorities have also created or adopted standards which are voluntary,¹¹ and hence, the distinction is of significance and these terms should be avoided to be used interchangeably.

⁵ Liu P. (FAO), Private standards in international trade: issues and opportunities (2009), p 3.

⁶ Standards Australia, *What is a standard?*, available at: https://goo.gl/FwYaEM, retrieved: 14 January 2017.

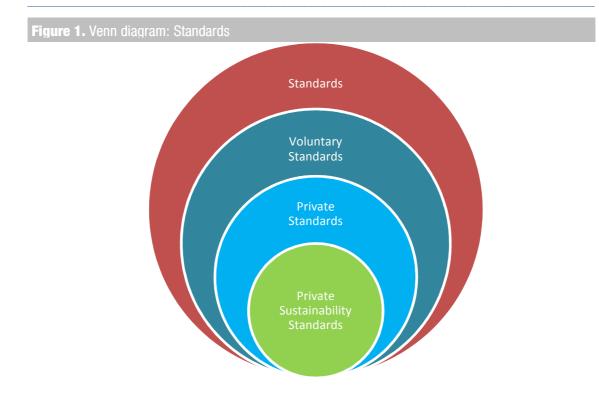
⁷ Schuster M. & Maertens M., *The Impact of Private Food Standards on Developing Countries' Export Performance: An Analysis of Asparagus Firms in Peru*, Elsevier (2014); *Trading with Conditions: The Effect of Sanitary and Phytosanitary Measures on Lower Income Countries' Agricultural Exports*, Policy Issues in International Trade and Commodities Research Study Series No. 68, UNCTAD (2014).

⁸ Anders, S., & Caswell, J. A., *Standards-as-barriers versus standards-as-catalysts: Assessing the impact of HACCP implementation on U.S. seafood imports*, American Journal of Agricultural Economics, 91(2), (2009), pp 310–321; Hoekman, B., & Nicita, A., *Trade policy, trade costs, and developing country trade*, World Development, 39(12), (2011), pp 2069–2079; Wilson, J., Mann, C. L., & Otsuki, T., *Trade facilitation and economic development: A new approach to quantifying the impact*, World Bank Economic Review, 17(3), (2003), pp 367–389; Tran, N., Wilson, N., & Anders, S., *Standard harmonization as chasing zero (tolerance limits): The impact of veterinary drug residue standards on crustacean imports in the EU, Japan, and North America*, American Journal of Agricultural Economics, 94(2), (2012), 496–502.

⁹ Xiong, B., & Beghin, J., Does European aflatoxin regulation hurt groundnut exporters from Africa?, European Review of Agricultural Economics, 40(5), (2013), p 895.

¹⁰ Henson, S. & Humphrey, J., "Understanding the Complexities of Private Standards in Global Agri-Food Chains as They Impact Developing Countries", Journal of Development Studies, Vol. 46, N° 9, (2010), pp 1628 -1646.

¹¹ Tea Board of India, a statutory commodity board of the Government of India, has created and endorsed the Indian Sustainable Tea Programme called, 'trustea', and has promoted widespread use of the Code.



Leading works on sustainability standards have proposed that 'private' in private sustainability standards systems highlights the non-governmental nature of these systems.¹² We differ from the generic approach towards terminology taken by Komives, K., and Jackson, A., to the extent that we do not consider 'private' to be covering all non-governmental entities. Standards created by entities which are statutorily established or are public-private bodies must be kept out of the umbrella of 'private standards'. They should continue to remain part of the larger set of voluntary standards, of which private standards constitute another part.

For e.g., the Quality Council of India (QCI), an autonomous national accreditation body in India, is a public-private entity setup by the Government of India along with industry associations – ASSOCHAM, FICCI, and CII. QCI is not a strictly government entity and neither can it be called a private body. It has designed host of Schemes that span across various sectors that includes traditional medicines, medicinal plants, ready mix concrete, agriculture, yoga, etc. These schemes have been designed as per international best practices that includes aligning them with ISO 17067, ISO 17065 for product certification and ISO 17024 for personnel certification. All the Schemes have been designed in a manner that after a span of one year of its launch these are operationalised through the accreditation mechanism by using the third-party audit bodies. These gives the Scheme much more credibility and acceptability in the international market.

These are voluntary standards, and some of them even promote sustainable practices. However, these cannot be called as private standards as they are not created by a strictly private entity. Therefore, in situations such as these, it becomes necessary to distinguish between the voluntary standards and private standards – owing to the nature of the body that creates them. This distinction is essential because often in developing countries, voluntary standards created, promoted, and endorsed by public-private entities or quasi-governmental bodies find greater acceptance from both the producers and the government.

¹² Komives, K. and Jackson, A., *Introduction to Voluntary Sustainability Standard Systems*, in 'Voluntary Standard Systems', edited by Schmitz-Hoffmann, C., Schmidt, M., Hansmann, B., Palekhov, D., Published by Springer (2014), p. 4.

1.1.2 Private sustainability standards

Private sustainability standards (PSS) are market-based tools for promoting sustainable production and business practices. A sustainability standard is a set of criteria defining good social and environmental practices in an industry or product.¹³ They are voluntary in nature and indicate that compliance is not a legal requirement for general market access (as is the case with public regulation), but rather a more far-reaching response to sustainability concerns as well as an opportunity to tap high-value market segments.

They are created by private (e.g. Fairtrade, FSC, GLOBALG.A.P., etc.) entities, mainly industry organisations and collectives, normally for promoting sustainable production, business practices and consumption by creating market demand for sustainable products, and a supply to meet that demand. They specify requirements relating to a wide range of sustainability metrics, including workers' health and safety, environmental measures, respect for human rights, and others. A literature survey has indicated that the PSS have emerged as a potent tool of market governance principally in the developed countries.¹⁴

1.1.2.1 Discussion

Adoption of PSS is intended to be voluntary as these standards are not created, run, or required compliance to by governments or government regulation. On the contrary, these standards are created by private entities and initiatives that seek to drive sustainable production and consumption by creating market demand for sustainable products, and a supply to meet that demand.¹⁵

The use of 'eco' or 'sustainability' in the name differentiates PSS from other non-governmental market based initiatives that are not focused on addressing sustainability concerns.

1.2 Global relevance of private sustainability standards

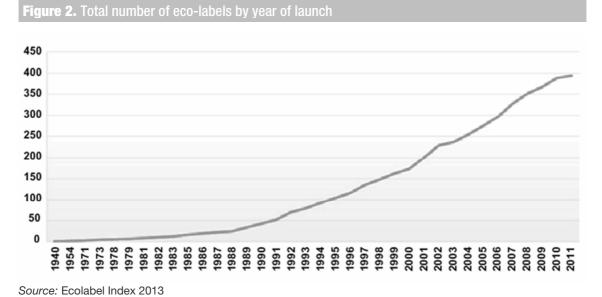
With almost 500 private sustainability standards (PSS) in 199 countries and 25 industrial sectors,¹⁶ the PSS system, involving testing, inspection and certification procedures across all market sectors which apply to samples, products, services, management systems or personnel, has become the new market reality as a tool for sustainable supply-chain management, marketing and competitiveness. These standards can become *de facto* mandatory when they dominate a given market.

¹³ ISEAL Alliance, *What is a Sustainability Standard*?, available at: http://www.isealalliance.org/waypoint/what-is-a-sustainability-standard, retrieved: 20 January 2017

¹⁴ Jaffee, S. and Henson, S.J., *Standards and Agri-food Exports from Developing Countries: Rebalancing the Debate*, World Bank, Policy Research Working Paper 3348, Washington DC, The World Bank (2004); OECD, *Private Standards and the Shaping of the Agri-Food System*, OECD, Paris (2004).; World Bank, *Food Safety and Agricultural Health Standards: Challenges and Opportunities for Developing Country Exports*, Washington DC, World Bank (2005); Humphrey, J., *Private Standards, Small farmers & Donor Policy: EurepGAP in Kenya*, IDS, Brighton (2008).

¹⁵ Komives, K. and Jackson, A., *Introduction to Voluntary Sustainability Standard Systems*, in 'Voluntary Standard Systems', edited by Schmitz-Hoffmann, C., Schmidt, M., Hansmann, B., Palekhov, D., Published by Springer (2014).

¹⁶ Voluntary Sustainability Standards and Inclusive Trade: The role of Government, Statement by Mr. Joakim Reiter, Deputy Secretary-General of UNCTAD at the WTO Public Forum.



The trigger for the rise of PSS is the changing market requirements which in turn are a consequence of liberalization, proactive approach of retailer groups and assertion of consumer preferences. It has been envisaged that the retailers and private business sector in order to offset their cost of risk management use PSS as a tool wherein they transfer the responsibility for risk management by outsourcing of standard setting which necessarily is not done through a balanced stakeholder consultation. It is often seen that the consumer perspective to ensure that producers follow certain set of norms during production and processing are captured in the form of requirements while formulating PSS. The PSS thus focus primarily on risk management and product differentiation across the value chain, which makes the business case for PSS.

Globally, it is experienced that there have been a host of PSS that have been successfully marketed to such an extent that they command a position that even regulations have failed to do. The PSS that have been able to change the procurement patterns of retailers are found to be in every sector that have created a technical barrier to trade for players that are outside the geographies from where they were formulated. In India, it has been found to be have made significant impact in the agri-food, textile and wooden handicrafts sector.

Some noteworthy examples are the Forest Stewardship Council standards for the wood that need to be sourced from sustainably managed forests, GLOBALG.A.P. for certified fruits produce especially that fresh fruits (grapes and pomegranates) that were primarily destined for the EU markets, Global Organic Textile Standard (GOTS) for organic textiles, and variety of other food and fair trade standards that were aimed for specific geographies which ensured that the developing countries are always struggling to keep up with their requirements just because some of the clauses/principles either were not being applicable in the countries from where commodities were imported or that the socio-economic or the demographic realities were not 'in-sync' with that of the standard requirements.

1.3 Developing countries scenario

The study of the effects of PSS on market access of developing countries has been an inevitable component of the sustainable development debate. Sustainable development is a larger issue encompassing the efficient allocation of the world's resources, domestic environmental imperatives based on the extent of the contribution to national and global environmental degradation, poverty alleviation, creation of additional wealth for environmental protection in developing countries, and so on. Thus, the relationship between trade and sustainable development depends on macro-economic and environmental policies. Even so, the increase in trade increases financial resources, which can make a positive contribution to sustainable development. This is particularly applicable to developing countries, whose responsibility towards environmental protection

could be discharged better through increased resources, generated through increased trade, particularly exports.

As compared to developed countries, developing countries are more vulnerable to the adverse effects of these standards on market access and competitiveness. Various reasons have been identified. Firstly, lack of infrastructural and monitoring facilities, limited technology choices, inadequate access to (and relatively more expensive) environmentally friendly raw materials and information are one set of reasons identified. Secondly, small and medium enterprises (SMEs) face more formidable compliance costs and there is an increasing emergence and duplication of PSS. Thirdly, developing country enterprises lack the skill and technology required for exploiting the positive trading opportunities generated by environmental measures. Fourthly, developing country exports are more vulnerable to market access barriers on account of their scale and sectoral composition. This is because developing countries are dominant producers/exporters of the product sectors where we find most of sustainability standards (i.e. agri-forestry products). A connected problem is the diseconomies of scale due to small domestic markets. Finally, while developed markets are more amenable to harmonization efforts, developing countries have widely differing environmental standards in accordance with their national priorities, rendering harmonization both difficult and inadvisable as compared to mutual recognition and equivalence.

Global brand producers and retailers increasingly require their suppliers from developing countries to comply with certain social, environmental and safety norms for fulfilling their consumer expectations. However, PSS imposed by producers of global brands and retailers may also go beyond national and local laws, and/or contain further conditions related, for example, to health and safety issues – sometimes imposed to show product differentiation either in terms of adhering to a specific environmental process or towards achieving a certain aspect of social welfare. A proactive strategy on the part of local manufacturers will make it easier for them to cope with such standards and will also lead to significant benefits, including competitive advantages, improved efficiency and, ultimately, more exporting opportunities.

1.4 Indian relevance

In India, PSS are seen to compete with the national regulatory institutions in defining the mandate for safety and quality. Therefore, in addition to mandatory regulations, voluntary measures affecting market access of Indian products require close consideration. Costs of compliance with eco-labelling criteria in the traditional medicines, textile and leather sectors have been found to be prohibitive, compounded by difficulties in accessing technologies, developing testing facilities and verifying compliance. For example, the costs of compliance with eco-labelling schemes by Indian footwear exporters may be 33 per cent of the export price.¹⁷ Emerging voluntary arrangements may also need to be analysed for their market access impact.

In the food and agriculture sector, they are seen to impact the production and processing hubs whose effect is now felt in the developing economies as the sourcing has been shifting from developed countries to developing countries. This disruption has been observed to be severe especially in the food and agriculture sector the most, though PSS are also emerging in the non-food sector.

In the domestic Indian market, PSS claim to ensure long term sustainability of value chains and prepares the national market for rising consumer awareness and demand for product & environmental safety, livelihood improvement of workers, together with improving competitiveness of industries, production practices of the fast-growing smallholder segment, and mainstreaming smallholders into the sustainability fold.

Besides existing international standards such as SA-8000, GOTS, Forest Management & Chain of Custody (FSC), Better Cotton, etc., India itself has responded to the development of standards in the form of

¹⁷ Communication from India, *The study of the effects of environmental measures on market access*, WTO Committee on Trade and Environment Special Session, WT/CTE/W/177, 27 October 2000.

voluntary standards such as Trustea, INDGAP, ZED, Voluntary Certification Scheme for AYUSH Products, Lead Safe Paints, and Medicinal Plant Produce. These have shown a promising way in India for development of private and voluntary standards, thereby achieving quality production along with introducing sustainability in process both in food and non-food sector.

Keeping this emerging PSS ecosystem in mind, India could unlock the full potential of attracting international investment and business if it prepares adequately and is able to prove its commitment and alignment to sustainability, with special emphasis on corporate sustainability and responsibility.

1.5 Genesis of the study

This study has its roots in the launch event of the Indian PSS Platform where key issues were identified in the area of PSS. In this event, representatives of QCI as well as UNCTAD identified the need for undertaking sector-specific product-specific studies to understand issues concerning PSS. It was highlighted by the participating stakeholders that agricultural products, textiles, and handicrafts may be considered as product groups on which the Platform could commence its deliberations or work on.

This foundation received further impetus through the meeting for the Stakeholder Launch of the Second Flagship Report of the UNFSS on 22 October 2016 at the BDE, German Industry Association Building in Berlin, Germany. The event was successfully organized and included the participation of high-level UN and government officials, industry officials, NGO, finance institutions, representatives from developing economies that included Brazil, India, Indonesia, China, Mexico that supported the PSS Platform. The meeting was moderated by senior experts Mr. Xinhua Sun, First Secretary, Permanent Mission of China to WTO, Dr. Thomas Fues, Head of Training, Deutsches Institut für Entwicklungspolitik/ German Development Institute (D.I.E.), Prof. Negi, Jawaharlal Nehru University, New Delhi. The other dignitaries who were members of the panel included Joakim Reiter, Deputy Secretary-General (UNCTAD), Dr. R. P. Singh, Secretary-General, QCI, Dr. Harsha V. Singh, Executive Director, Brookings India, and Ralf Peters, Chief Trade Information Section, UNCTAD.

QCI, as a Secretariat of the Indian PSS Platform, expressed its commitment to support the development of this initiative, including through co-funding of key activities and staff-time. It further explored cooperation with the D.I.E. to explore the possibility of introducing PSS Platforms in the G20 countries. A draft statement was also presented to the group of participating countries for their review and D.I.E. had taken the responsibility to lead the process for adoption of the statement. QCI maintained in the meetings that greater transparency was required in setting up of standards; that the government should not be interfering in the standard setting process; that the government needs to wholeheartedly support the industry by tacking the issues arising of the PSS. The meeting also addressed the issue of why sustainability reporting, information and data mattered immensely in order to increase accountability and support sustainable production.

Dr. Harsha Vardhana Singh, Former Deputy Director-General of WTO, made a series of observations on the situation surrounding PSS, some of which are as follows:

- a) Most products in a country's context don't have much export potential;
- b) Use of PSS is increasing in domestic markets;
- c) Large scale evolution and development within the domestic markets;
- d) International markets are choice whereas domestic reason/ecosystem is important;
- e) Quick learning with organisations like QCI;
- f) Each country needs to decide the balance of export and domestic market requirements;

- g) QCI example to be studied and emulated;
- h) Within India and China the Governments need to be involved;
- SAARCGAP an initiative by FAO assisted upon by QCI is a fine initiative attempting to address the regional markets with common set of practices.

Owing to this background, the UNCTAD, as a part of the Steering Committee of the UNFSS, commissioned a set of references for this detailed study for presentation to the various stakeholders including the Steering Committee and Multi-Stakeholder Committee of the Platform.

1.6 Goals of this study

The study attempts to address the following two questions:

- Why we discuss that Private Sustainability Standards (PSS) may have significant impact upon India's trade success and sustainable development?
- Which product-groups are the key priority groups for this study? What is the rationale for the selection?

The goal of this study is to understand the ecosystem of PSS in relation to the issue of market access and sustainable development, specific to the priority product groups (PPGs) that have been identified for the study.

The study aims to assess the role and contribution of PSS (with focus on the PPGs), if any, to India's trade, and analyse if PSS have an impact to achieve sustainable development. It further explores the role of accreditation and certification bodies for operationalisation of the PSS in the Indian context. This study aims to identify key PPGs along with the rationale of selecting them as cases to attain the above objectives. The PPGs chosen (and later substantiated) include agri-food (tea & grapes), forestry (handicrafts) and textile.

The study further aims to highlight the positive social, economic and environmental impacts that PSS might have on the society and business ecosystem, the benefits of certification, and the increased endorsement of the sustainability standards system by government mechanisms, statutory entities, and policy initiatives in an India which is yet wary of them as potential technical barriers to trade. While doing so, the study will learn from the good practices being followed in similar areas across the world and highlight them wherever necessary.

2. Methodology

In this section, we cover the methodology that we have used for this study. It consists of mixed method involving literature review, statistical studies, and perusal of research that already exists in this domain, coupled with experiences of the drafting organisation of this report in the area of standards development, accreditation, and third-party assessments, along with interviews of implementing experts. We detail the same below.

2.1 Literature review

To better conduct our literature review, we took assistance of the systematic literature review methodology used by the International Trade Centre in its Literature Review Series.¹⁸ The method is centred on creating a replicable, scientific and transparent process which aims to minimize bias through exhaustive literature search of published and unpublished studies and by providing an audit trail of the reviewer's decisions, procedures and conclusions. The method consists of ten steps that can be grouped in three phases: planning and search, screening, and extraction and analysis. In a first step the main questions guiding the research were defined and all relevant sources of literature were identified. This included: (i) identification of the main keywords used in the different streams of literature. These keywords were later used to build arch strings in the most comprehensive academic search databases; (ii) identification of key journals that are not covered by these databases and use of an additional database to search these journals applying the same keywords; (iii) review of the references used in previous literature analysis; (iv) review of influential authors in the field; (v) identification of central research institutes and international organizations in the field and review of their publications and (vi) identification of key articles and book sections providing background information on specific topics.

The next step in a systematic literature review consists of the selection of papers based on their relevance and quality. The screening process entails three steps: a title review, the review of abstracts and the full paper review. Before each step inclusion and exclusion criteria was defined to ensure transparency and the ability to replicate the process.

Lastly, in a final screening step full papers were reviewed according to quality selection criteria that included aspects such as contribution to research, clarity of data collection and sampling methods and the linkage between the methodology used and conclusions reached.

An important distinction was then made among the empirical papers as to which of these were based on strong credible counterfactual outcomes and which, though applying a valid methodology, did not built such a strong counterfactual. This distinction follows the one made by Blackman and Rivera in their methodology for reviewing literature on private standards stating that:

'To credibly identify the impacts of certification, an evaluation must construct a counterfactual outcome, which is an estimate of what environmental or socioeconomic outcomes for certified entities would have been had they not been certified. The impact of certification is defined as the difference between the actual outcome and counterfactual outcome.'¹⁹

Following these criteria, groups were identified for the papers. Group 1 included articles with strong counterfactual outcomes and were used as the basis of the analysis and the conclusions of this study. Group 2 included all empirical articles that, though following a solid methodology and being considered a paper of high quality, were exploratory in nature or designed without the use of a strong counterfactual component.

The analysis was then carried out in two areas: a descriptive one and a thematic one, and the findings are summarized in the next two sections. Although it is not possible to aggregate the information from these different studies, the results across the various research pieces provides a view of the areas where stronger results have been identified and areas where private standards have not resulted in net positive gains.

The Systematic Review methodology offers a comprehensive and transparent process to review a broad spectrum of studies in a specific field. It is, however, not without its limitations. An important one is

¹⁸ International Trade Centre (ITC), *The Impacts of Private Standards on Producers in Developing Countries*, Literature Review Series on the Impacts of Private Standards; Part II, Geneva: ITC (2011).

¹⁹ Blackman, A. and J. Rivera, The evidence base for environmental and socioeconomic impacts of 'sustainable' certification, Resources for the future, Washington, DC (2010), p 3.

related to the screening process being biased towards articles rather than books, as the first are captured by electronic search engines while the latter ones are not and are only identified through cross-referencing and author research. A second limitation, more specific to this topic, is that a large amount of research on the impact of standards is being carried out by standards organizations. On the one hand, these studies may be geared more toward monitoring sets of activities rather than measuring impact. On the other hand, the objectivity of some of the studies can be called into question when they are sponsored and carried out by the standards organizations themselves. Peer review is a generally accepted form of overcoming perceived or real lack of transparency. But most of the research on standards carried out by standards organizations has been published by the organizations themselves and are not necessarily peer reviewed, which, for purposes of this research, is taken into account when assessing the quality of the research and can thus leave out relevant and high-quality research that has been undertaken by these organizations.

Still, even accounting for these limitations, we believe the process allows the integration of a large body of research in a way that minimize bias and, by providing a framework and an audit trail, can be modified to incorporate new data as this is uncovered.

2.2 Organisational experience

This study comes at a crucial time when Quality Council of India has been identified as the hub of voluntary and private standards in the Standards Conclave 2014 in India, followed by which, QCI actively became a stakeholder of the UN Forum on Sustainability Standards and thereafter went on to establish the first national platform on private sustainability standards. QCI was set up jointly by the Government of India and the Indian Industry represented by the three premier industry associations i.e. Associated Chambers of Commerce and Industry of India (ASSOCHAM), Confederation of Indian Industry (CII) and Federation of Indian Chambers of Commerce and Industry (FICCI), to establish and operate national accreditation structure and promote quality through National Quality Campaign. QCI is registered as a non-profit society with its own Memorandum of Association. QCI is governed by a Council of 38 members with equal representations of government, industry to the government. The Department of Industrial Policy & Promotion, Ministry of Commerce & Industry, is the nodal ministry for QCI.

It functions through the executive Boards in the specific areas i.e. Accreditation for Conformity Assessment Bodies, Healthcare Establishments, Education & Vocational Training Providers. While QCI's main role is in certification and accreditation of quality across various sectors, it is now increasingly taking on roles in Quality Promotion across the nation through various national level initiatives, ensuring quality across all spheres.

In the preparation of this study, the author has derived substantial experience from QCI's expertise in these related areas over the last couple of decades. QCI has been in the forefront of addressing the needs of the various stakeholders including intergovernmental agencies such as the FAO of the United Nations, various central government ministries, central government boards, industrial associations and international NGOs with solutions related either introduction of quality or standardisation for their quest to continually improve.

2.3 Consultation with experts

The report is being consolidated by the group that is also manning the PSS platform within the Secretariat. There have been detailed discussions during the first multi-stakeholder meeting (MSC) held on the 16 December 2016 which had a host of experts from various sectors converging and sharing their view about the PSS relevant to their areas. Summary record²⁰ of this meeting will give further information about the inputs.

²⁰ Summary Record of the First Meeting of the Multi-Stakeholder Committee of the India National Platform on Private Sustainability Standards, 16 December 2016, INPPSS/M/SR.1 (2016).

There has been a process of consultation amongst the private standard owners, the consumers, various government organisations including export promotion councils. Stakeholder organisations who have provided input for the purpose of the platform and further research include: Solidaridad (trustea), GOTS, FSC, Sutradhara, NCCF, WWF, CII, FICCI, BRC, BCI, and EEPC. The meeting gave insights of the stakeholders and 360° view of the PSS ecosystem at work. Since the report has an ambitious scope, the consultations with the experts have primarily been through emails and their inputs during the MSC meeting. The inputs from the consultations with the experts have been integrated within the report at relevant places.

2.4 Selection metrics & priority product groups

The importance and prevalence of private standards vary among sectors. As mentioned earlier, consumer concerns about health and safety, as well as social and environmental conditions in the supply chain of different products, have been one of the major drivers behind the proliferation of private sustainability standards. More so than in other industrial sectors, this makes brands and retailers in textiles and garments, forest based products, agri-food products who have in the past faced considerable negative publicity, more aware of the importance of setting standards for the social and ecological performances of their suppliers.

The selection of the priority product groups has been done on the basis of the groups that have experienced the maximum intervention of PSS as market requirement and who, in the past, have come under scanner for issues like unfair wages (textile), use of pesticides (agri-food) and illegal logging or poor use of forest resources (forestry). The impact of the PSS has been maximum in the textile sector followed by agri-food and in the wooden handicraft market. The rationale of identifying these sectors is efforts that have been put not only by the industry but also by the Governments by launching Schemes such as DISHA (textiles), VRIKSH (wooden handicrafts) and the various provisions made by APEDA for the export of fresh fruits and vegetables especially in the grapes and pomegranates exports.

Additional assistance was sought from the surveys conducted by UNIDO²¹ among developing country exporters, which demonstrated that Brazilian furniture exporters are confronted with far fewer private standards than the Indian leather and footwear exporters and Turkish textiles exporters. This might be explained by the fact that textiles and footwear have been the sectors that have experienced the longest and strongest public pressure. However, this is not to imply that the wood and furniture sectors have escaped public pressure entirely. Concerns about the disappearance of rainforests worldwide have affected wood and furniture companies. The establishment of the Forestry Stewardship Council (FSC) certification scheme has responded to this concern and all the major wooden handicrafts exporters in India have now have FSC certification. Although this figure is lower than the percentages of the certificates (for another PSS) most commonly held by textile exporters (90% Oeko-Tex, 48% Global Organic Textile Standard – GOTS) and the kind of PSS seems to be different for different product category – e.g. Indian leather exporters (44% SA 8000).

With the rise of these standards in the recent years, Indian markets have witnessed a wave of these standards introduced rampantly in both food and non-food sector. Though the primary objective of the PSS is to create a product differentiation by claiming a unique feature built into it, there is a humongous range of heterogeneity in the purpose and objectives of the private standards owing primarily to the variety of interests that guide the development of such standards. In order to study the interplays of this landscape, it is necessary to identify product groups where such standards operate heavily and which show consumer demand primarily through their exports.

India's export statistics over the last decade portray petroleum products, precious stones, machinery, iron and steel, chemicals, vehicles, and apparel to be the principal commodities for exports which show a fair growth percentage and revenue generation. However, these product groups are largely operated through

²¹ UNIDO, *Making Private Standards Work for You: A guide to private standards in the garments, footwear and furniture sectors*, Vienna (2010).

compliance with regulations and their markets seldom face the disruption of private standards. Upon perusal of the next closely following products in the export stats, it was observed that *agricultural food produce, textiles, and forestry (handicrafts)* enjoy high value export share and also face myriad of stringent PSS. Further, India has remained notably concerned regarding the strict regulations in the food processing and agro-products sectors, and has raised questions not only regarding viability of compliance costs but also on their environmental justification. The EU's ban on the use of all hormones, natural and synthetic, in livestock production is an example. India had maintained then in the WTO that the ban was perceivably pervasive, not based entirely on scientific principles and may entail trade restrictions of proportions much higher than the risks that non-fulfilment may create.²²

As a result of which, we determine to study these three areas for the purposes of this study. Broadly, in each of the product groups, we endeavor to assess the market access conditions – prevalent before PSS introduction and after, key concerns in the sector, impact of PSS, trade standpoints and sustainability metrics.

3. PSS landscape in India

The major types of private standards are product, process or management systems standards. A product standard address and defines the attributes of a product which are quantitative in nature in terms of either shape, size, colour, active ingredient, brix value or any other such attribute which the private standard owner wants to reflect. A process standard aims to define the process which needs to be adopted to deliver the outcome of the product. An example would be the organic standard that describes the way of farming in a manner that the end product or commodity is such that it is devoid of chemicals and pesticides. Management systems are system standards that primarily include common components like document control, internal audit/review, corrective and preventive action etc.

Private standards are more focussed on meeting requirements of a very select group of individuals, retailers or consumers wherein the process of setting up of criteria for the standards are at times deficient in transparency and a disconnect from the ground realities. While doing so the process oriented approach adopted by the retailers to please particular advocacy groups, has seen to rarely comply with the WTO's principle of non- discrimination.

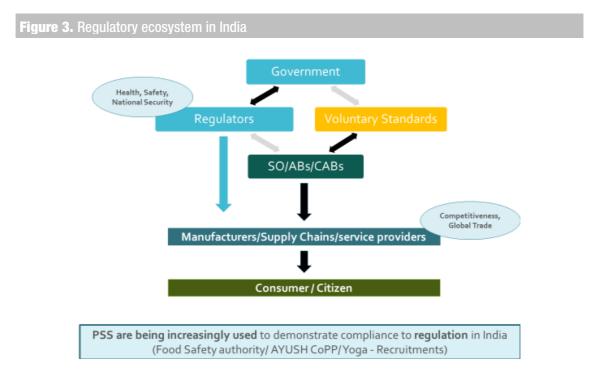
It is seen that most of the private standards are developed tend to be largely closed, with little or no scope for input from stakeholders unless specifically invited to make them by the private food firm that is establishing the standard. Private standards firms or organisations tend to develop standards using internal technical resources and/or external consultants.

3.1 Existing standards ecosystem

The existing regulatory ecosystem in India consists of the Government at the top of the chain followed by regulators and standards bodies. Regulators are mostly public agencies who create the mandatory technical compliances required for products and processes. Standards bodies create voluntary standards in line with regulations or international standards or industry best practices. These standards see compliance assessment through certification which is executed by the Certification Bodies or Conformity Assessment Bodies, which conduct inspection, testing and/or certification of the supply chain at various points of demand – such as manufacturer, service provider, technological systems or the product itself. This certification finally

²² India may not be affected on this account as there is little use of hormones in India, but restrictions on milk/milk products from animals not being stall-fed has led to problems in market access. Marine products have been facing market access barriers on account of metallic, pesticide and antibiotic content (e.g. more than 0.2 per cent of benzoic content in shrimps from India compared to 0.6 per cent from elsewhere) or handling, processing and storage regulations, (e.g. strict EU regulations on packaging, treatment systems and transport arrangements).

enables the consumer to make preferences regarding products and therefore, adherence to such standards creates product differentiation in the market.



Standards bodies in India create voluntary standards. The objectives of these standards are governed by the existing regulatory regime, need for differentiating product, advocating ethics in business by including workers' health and safety. Apart from these there are certain operational objectives that focus on delivering the expected outcome from the standards implementation. For instance, a forestry standard would aim to source wood produce from sustainable forestry, an organic standard would aim to produce agri-commodities that are free from pesticides and heavy metal residues and a social standard ensuring that labour rights, worker health and prohibition of child labour is ensured. Similarly, religious standard such as Kosher and Halal ensured that the religious practices are undertaken keeping in mind the food safety requirements.

Lately there have been several levels of requirement imposed in the international markets that are mostly led by the retailers' association such as GLOBALG.A.P., BRC (British Retail Consortium), SQF (Safe Quality Food) in the global arena that has made impact in the Indian markets. There are several global initiatives like Worldwide Responsible Apparel Production (WRAP) certification, Forest certification, Green buildings/products, and Social Accountability (SA 8000) that address the concerns of the consumers and pressure groups. While other countries have managed these as national programmes driven by stakeholders, in India, individual companies/exporters irrespective of size, have to deal with the buyers on their own. However, recently it has observed that certain Government Departments or the Export Promotion Councils looking after export of certain commodities have taken onto themselves to create schemes that portray their stakeholders to be compliant to the international requirements.

3.2 Regulation v. Voluntary standards

Technical regulations are mandatory requirements of the Indian government, which are meant to fulfil certain legitimate objectives. The legitimate objectives are to protect human and animal health, safety, and environment, prevent deceptive trade practices, as well as ensure national security. These are formulated by regulatory authorities such as the Food Safety and Standards Authority of India, Bureau of Indian Standards, Commodity Boards and other statutory authorities mandated for such development of regulations. Standards are also to be developed for common use with similar objectives as voluntary documents – such as the

numerous voluntary schemes being run by the QCI for the likes of lead content in paints, AYUSH medicine etc., ZED, Yoga etc.

The difference between a standard and a technical regulation lies in compliance. While conformity with standards is voluntary, technical regulations are by nature mandatory. They have different implications for international trade. If an imported product does not fulfil the requirements of a technical regulation, it will not be allowed to be placed in the market in that country. In case of voluntary/private standards, non-complying imported products will be allowed in the market, but then their market share may be affected if consumers prefer products that meet such standards such as quality or colour standards for textiles and clothing.

3.3 Private sustainability standards

3.3.1 Approaching PSS

This is the opportune time to understand the distinctions and inter-relationships of public regulation to that of private standards, in that, specifically about PSS. While the role of PSS is to address the risk management, they largely lend product differentiation to producers in the market place driven purely from a financial view point. However, if they do not follow a process of transparency in development of standards, it leads to lot of hardship to the producers and processors especially those who are placed in remote locations and far off geographies.

Various organisations have been formulating PSS as a response to the trade compulsions to be viable in changing market scenario. The most important factor behind PSS is globalization of procurement where raw material sourcing has cut across geographies and economies. Since the production base has wide geographical boundaries, the quality of material is always of concern for the global sourcing agency. In order to instil a mechanism to harmonize quality from widespread sourcing the procurer mandates certain parameters defining the product which forms the major part of the private standard.²³ With large orders to be placed, the retailers are seen to dictate their requirements onto the exporters or their suppliers. Initially the prescription was limited to product specification but over a period of time the prescriptions widened to other considerations such as workers' health and safety, environmental conditions.

Additionally, proliferation of PSS has also resulted due to the overall strengthening of regulatory requirements that has increased the level of liabilities on the company that are engaged in products that have element of safety especially in the pharmaceutical and food sector. The food sector standards have had much more impact on trade than the non-food ones since the food sector affected not only processing but also had ramifications on the production which is agricultural – majority of which is in the developing economies. The agri-food sector has witnessed a variety of standards being formulated and accepted by stakeholders.

The key factors for this presumably are the reforms that are carried in the food safety regulatory requirements around the globe, heightened awareness amongst the consumers and the business, globalisation of supply chains and privatisation being accepted as tool to market governance. PSS have always existed in the agricultural sector, but their number has risen markedly since the early 1990s. World over, mechanism of development of private standard stems out of the requirement felt by a group of people that have a common objective. These could be in the form of retailers or buyers that need to make recommendation for certain type of sourcing or the consumer that demand a specific element in the products that they consume.

²³ Liu, P., Certification in the value chain for fresh fruits, FAO, Rome (2009).

3.3.2 How PSS stakeholders approach the market

There are various ways in which a PSS owner wishes to position her Scheme with respect to market demand. Faced with a situation, an owner can approach the issue of designing her scheme either in a reactive or a proactive approach. The reactive approach implies that the owner will put together a new set of requirement for the supplier to adhere to at all times. The proactive approach implies that owner adopt ambitious trajectory in order to cater to the consumer demand. The process of developing a standard starts by developing a vision and commitment, is followed by the introduction of and compliance with a set of serious social and environmental standards and ends with external verification in order to authenticate the new improved standards attained. By doing this, the standard owner positions his PSS to showcase increased competitive advantage, improved efficiency and deliver a wider compliance statement to name just some of the benefits involved.

The social and environmental concerns of brands and retailers have also led to a stricter requirement for compliance with their codes of conducts designed in the form of a Scheme further down the value chain. Since buyers are increasingly aware of the risks to their reputation inherent in breaches of workers' rights, human rights violations and environmental degradation, their direct suppliers will need to have more control over what is happening with their own suppliers and/or sub-contractors in order to ensure the traceability of the end products. In order to achieve such a state, the buyers either shall prescribe a set of requirement or easier way is to identify a PSS and make it as a pre-requisite for trade.

3.3.3 Issues surrounding PSS

In India, PSS raise a number of issues that attract the scepticism of recipient stakeholders, regulators, and government institutions. These are due to the nature of their ownership and their development process, which is seldom sufficiently participatory, transparent and based on scientific evidence; other criticisms include absence of a coordinated local voice, multiplicity of standards and certification processes, and the cost implications to adhere to them. This becomes particularly problematic for a producer which already faces sectoral regulations.

PSS are sometimes also perceived as becoming technical barriers to trade now since in certain importing economies governments have given tacit cognisance to specific standards, thereby increasing the pressure on their compliance, which hits the voluntary nature of these standards.

Furthermore, PSS requirements can cover a broad spectrum and include, inter alia, charges for environmental purposes, requirements relating to products including standards compliance, eco-labelling, packaging and recycling requirements for achieving environmental objectives. Such requirements have significant effects on the market access of developing countries such as India into markets that prescribe them. These effects could be positive or negative. Positive effects, or opportunities, are not always easy to exploit and require expertise, technology and resources that may not always be available. Negative effects relate to expenditures incurred to adapt to new standards etc. to acquire the necessary technology and expertise, to non-availability of materials for meeting requirements (such as packaging requirements) and the administrative apparatus required in exporting countries.

3.3.3.1 Definition and place in the standards ecosystem

Defining 'private standard' / 'private sustainability standard' is almost impossible for there exists a multitude of norms, guidelines, codes and initiatives with different types of communication and verification mechanisms that are collectively considered to be constituting so. In fact, most private standards are not 'standards' in the strictest sense of the term. Even within these various types of standard, there are wide differences with regard to the application and governance required, their substantive focus, level of stringency, and auditing processes. In this chapter, an attempt is made to capture this variety in private standards by providing an overview of a broadly representative set of such standards.

PSS are also confused with the international voluntary standards that are developed by international standards development organizations, such as the International Organization for Standardization (ISO) and the

Codex Alimentarius. These requirements may relate to production processes, product design and performance. Although the standards developed by these organizations are voluntary, they are not considered 'private' because they are prepared by the international standardization community and are based on international consensus among member bodies, which are governmental, parastatal or nongovernmental. Such international voluntary standards can be part of the contract between a supplier and a buyer.

Quality infrastructure is a system and framework of institutions which jointly ensure that products and processes meet predefined specifications. It aims at providing technical support to the industry so that they can improve their production processes and at ensuring compliance with regulations or international requirements. At the same time it also provides the government and the regulators means to ensure certain minimum levels of quality and safety in the products consumed inside the nation or traded externally with other countries.

The total global trade is already impacted by standards and regulation. The costs associated with technical regulations, standards, compliance certification and testing have become significant, especially when goods produced are rejected or have to be discarded. The production system needs constantly to adapt processes, inputs, technologies and the design of products to meet foreign/ international standards and regulations in order to have access to external markets. This requires the traceability of measurement units to a common reference so that goods meet the characteristics required by such standards and regulations can be developed. Manufacturers need to be confident that their products comply with all the regulations imposed by the targeted markets as the costs and time associated with disputation may be prohibitive. The system has to ensure the adequate calibration of measurement instruments and a structure that evaluates whether the products conform to the norms. Also, if the national quality infrastructure is expensive or internationally not recognized, local manufacturers lose international competitiveness when compared with countries with better functioning quality infrastructures. Further, consumers are also willing to pay a price premium for products and services which ensure quality, address their concerns or offer new benchmarks/features. In order to reap the benefits associated by providing quality goods and services, manufacturers need to be able to make their superior characteristics visible to consumers. Credible conformity assessment plays such a role, hence increasing competitiveness of local manufacturers in global markets.

3.3..3.2 Arbitrary formulation

One of the major issues with PSS in India is the perceived arbitrary manner of their formulation keeping aside tenets of science. This is true when standards are set to address biological production systems as agriculture and forestry since there is a huge variation that exists around the world. The different edaphoclimatic factors along with the cultural diversity define the methods and rationale of production and cultivation practices. It has been suggested that to ensure that the standard addresses the prevalent production system, the PSS needs to be designed as generic standards or guidelines to be used as a framework by local standards-setting apparatus rather being prescriptive and imposing unrealistic requirements on the producers.

3.3.3.3 Transparency

There has been already enough criticism of PSS that their development process is neither participatory nor transparent. In a meeting of SPS committee, one of the participating nations expressed its concerns about the proliferation of PSS being a hurdle in reaching consensus on standards and facilitation of the international harmonization. The representation of the participating nation stated, *"If the private sector was going to have unnecessarily restrictive standards affecting trade, and countries had no forum in which to advocate some rationalization of these standards, twenty years of discussions in international fora would have been wasted."*²⁴

²⁴ G/SPS/R/37/Rev.1, Note by the Secretariat, *Summary of the Meeting held on 29-30 June 2005,* Committee on Sanitary and Phytosanitary Measures, World Trade Organization (2005).

As PSS are developed by a variety of private companies and NGOs that differ in their institutional structure and degree of integration of processes of standards development, implementation and adoption there is a great deal of challenge faced by entities that strive to internalise these standards both in terms of resource and time.

PSS may compete with government regulations and be more demanding in both stringency and scope than regulations without clear justification. Some critics have argued that they undermine the multilateral trading system and intergovernmental standard setting bodies.²⁵

3.3.3.4 Accountability

While the Government instituted standards have been sufficiently protected with dual accountability mechanism of TBT and SPS, the PSS seem to be accountable only to their stakeholders which at times are not necessarily based on public good at large.

This approach towards short-circuiting quality process often results in creating confusion among the primary stakeholders i.e. producers and growers, on the modalities of imbibing to the requirements stipulated by other stakeholders including national agencies and country regulator. This also creates a situation wherein the implementation of national regulation faces challenges as the implementers have already experienced the watering down of processes for meeting compliance.

3.3.3.5 Overlap

The challenges with the PSS are more visible when they overlap on areas that are already addressed by the technical regulations. The problem arises when the PSS tend to become more restrictive or in certain cases become more prescriptive without assigning specific reasoning and logic. It has been seen that the benefits of a private standard to the consumer are solely guided by the interest that is captured in respective standard. It is often seen that the private standard is seen to cater to a very narrow audience principally keeping commercial interest in view. In contrast, when government introduces a voluntary standard, it reflects the collective public interest of the masses.

While primary aim of PSS is to gain commercially by following certain consumer specific requirements, standards formulated by Government and international organisation are aimed to create transparent markets (for example, by defining standard weights and sizes or technical norms) in addition to meeting consumer safety.

PSS have been formulated by a select group of interest group that would want to achieve specific objectives irrespective of the ground realities. It is now seen that the production and processing bases are far off geographically speaking and these bases are seen to have being under distinct disadvantage as these work on different paradigms in terms of infrastructure, understanding and compliance level as set in the private standard. As a result, some standard requirements and indicators may not be suitable to all producers, especially for those who are outside the area where the standard was originally developed. In this era of globalisation, a production or processing base that is far from the standard setter's geography comes into a distinct disadvantage should the requirements be alien to the culture and geography it operates in.

3.3.3.6 Compliance

The problem faced by the exporters and producers while implementing PSS is the sanitary and phytosanitary measures in export markets are principally based on consumer preferences which may not be necessarily understood by the producer groups in other geographies. Therefore, there is first this lack of understanding about the requirements and secondly a lack of financial and human resources to establish a system that is compliant with technical requirements of the private standard.

²⁵ Liu, P., Certification in the value chain for fresh fruits, FAO, Rome (2009).

In order to be compliant to the 'alien' requirement, the production and processing base are required to invest heavily to align their systems to gain markets. A report by FAO mentioned that prescriptive requirements in a private standard tend to pose more difficulties for producers in other production systems than those for which the standard was originally developed or with which the authors of the standard are familiar, as many of the criteria may be irrelevant for the target stakeholder. Citing example of GLOBALG.A.P. standard, it has been mentioned that the scheme was originally designed for European farmers which when tried to internalise in Africa, had requirements that were found to be both irrelevant and excessively costly for the African smallholders.²⁶ The same challenges were experienced by the Indian farmers while internalising their systems as per GLOBALG.A.P. requirement.

The producers in developing countries are expected to meet requirements mostly of the importing countries from where the PSS emerge. The problem compounds when exporters need to actually try to simulate and set up systems that remotely resemble and more often not applicable to their domestic markets.

Complying with some PSS and demonstrating compliance requires substantial capital, time and skills. If the standard, or some parts of it, is not of relevance or not suited to the producers' situation, there is a strain of time and money to the producer. It has already been reported that the prescriptive requirements tend to pose greater strain on producers of production system that are alien to the requirements of the standard if developed keeping in mind a narrow vision/geography.

3.3.3.7 Inclusiveness and harmonization

In the developed economies, the governments only involve themselves in regulations – which are undeniably government's responsibility and leave voluntary standardization to the market and private sector. The national standards bodies in most developed countries are private bodies even if they may have government recognition and are strongly driven by industry whereas in developing economies, in the absence of a viably strong industry, voluntary standardization has been initiated by the governments by setting up the national standards bodies – thus government is involved in both technical regulations and voluntary standards.

However, such voluntary standardization is usually consensus based and adheres to some rules – notably the TBT Code of Good Practice and delivers such internationally popular standards as ISO 9001, ISO 14001, ISO 22000. The PSS, on the other hand, could be arbitrary and driven by profit motive and yet if they do become popular, we have to learn to not only live with them but respond effectively to them.

Clearly, buyers and producers are faced with many overlapping but nonaligned standards. According to some estimates, more than 1,000 codes of conduct and management systems exist. This results in increased management costs and complexity for all stakeholders, including buyers, certification companies and, of course, suppliers.

Since there seem to be many points in common in terms of the basic requirements of both private and public standards, harmonisation would seem to be an achievable and desirable objective. The elaboration of such 'meta' standards has been discussed in many fora in recent years. In theory, international management system standards, such as ISO 14000 or ISO 26000, were developed precisely to deal with the problem of multiplying standards. Notwithstanding this objective, the number of schemes has, in fact, continued to increase.

²⁶ FAO, Private standards in the United States and European Union markets for fruit and vegetables, FAO, Rome (2007).

As development of such 'meta standards' has been found to be more difficult than expected, several benchmarking schemes have been set up aiming at the creation of reference tools which describe emerging best practice. The ISEAL Alliance, a global association for social and environmental standards, has been developing a Code of

Good Practice for Setting Social and Environmental Standards which was first launched in 2004. It has also been involved with brokering Mutual Recognition Agreements (MRAs) between its founding members, such as the International Federation of Organic Agriculture Movements (IFOAM) and the Fairtrade Labelling Organization (FLO). There is still a significant amount of diversity, however, since negotiating Mutual Recognition Agreements between





schemes is an overwhelming task given the number of interests involved and the variation in weight and resources brought to the negotiating table by the different actors.

Safety standards are most probably leading the pack in progressing towards increased harmonisation, as seen in benchmarking initiatives in the food safety sector. However, concerns regarding the inclusiveness of standard-setting processes will surely continue and it will take a significant amount of time and effort to reach meaningful harmonisation and streamlining of existing schemes.

3.3.3.8 Issues faced by producers and smallholders

The business and producers in textile, agriculture, forestry, fisheries, craft and trades are the ones that are most affected by the private standard initiatives. These affect the small and medium sized enterprises more because unlike large companies, they tend to have limited capacities of their own and depend upon guidelines that relate to their own set-ups.

As a result, some standard requirements and indicators may not be suitable to all producers, especially for those who are outside the area where the standard was originally developed. Complying with some PSS and demonstrating compliance requires substantial capital, time and skills.

Yet, the value generated by the standard tends to be captured by downstream market operators, in particular large-scale retailers, and only a small share accrues to producers. The problem is compounded when the standard is de facto mandatory because a majority of large buyers demand it. As a result, small-scale producers run the risk of being excluded from high-value markets. This problem is particularly acute for developing countries due to the lack of infrastructure and public finance to help domestic producers adopt standards.

3.3.3.9 Government

Private sustainability standards are standards designed and owned by non-governmental entities, be they for profit (businesses) or not-for-profit organizations. Whereas governmental standards (usually called 'technical regulations') may either be mandatory or voluntary, private sustainability standards are voluntary by definition. These standards have always existed in the trade, but their number has risen markedly since the early 1990s. With the advance of globalization this type of standards have increasingly applied to international trade. Yet, the multilateral trade rules that apply to technical regulations have so far not been applied to these standards.

These standards may be problematic when they address areas that are already covered by adequate technical regulations. Two problems may arise: they may be more restrictive than technical regulations, or they may be more prescriptive, or both, without objective reasons. The benefits of a private sustainability

standard to society depends on the extent to which the objective of the prescribing organization meets the collective public interest. The problem with standards set by businesses is that they may be used as a tool to differentiate the company from its competitors. When the firm sets a standard to achieve narrow corporate goals only, such as improving its image, no benefits may be expected.

3.3.3.10 Sync with WTO agreements

In India, we see a mushrooming of PSS that poses a challenge to the national regulatory frameworks and to mechanisms set up by international bodies such as World Trade Organisation. It also creates distortion in the logical progression of growth for developing economies and compete for space with functions that is bestowed with that of public regulator.²⁷

As far as standards are concerned, the underlying principle of the WTO Agreements is to have a country align its technical regulations with international standards; these are not considered barriers and in fact are seen as trade facilitating, although for developing countries like India, they do become a barrier until the industry upgrades to them. Add to it the current scenario that is seeing a surge of PSS which are mostly imposed from developed economies and the misery of countries like India gets compounded.

Market access barriers on account of non-product-related production methods having little transboundary effects is an emerging area of concern. India has faced unilateral restrictions on import of shrimps harvested without the use of turtle excluder devices; similar restrictions may come up with tacit support of PSS by developed economies. While the WTO has ruled against these restrictions, global environmental concerns are sought to be enforced through unilateral trade measures, which may neither be at the root of the environmental problem nor be the most efficient means for environmental protection. It may also have given rise to protectionist tendencies much against the understanding of the applicability of non-product-related processes and production methods to the multilateral trading system.

²⁷ Henson, S.J. and Caswell, J.A., *Food Safety Regulation: An Overview of Contemporary Issues*, (1999); Havinga, T., *Actors in Private Food Regulation: Taking Responsibility or Passing the Buck to Someone Else?*, Paper presented at the symposium "Private Governance in the Global Agro-Food System" Munster, Germany, 23-25 April 2008.

4. Trade and sustainable development

4.1 Indian sustainability concerns

The Post 2015 UN Development Agenda is a unique participatory exercise that has led to the design of a Sustainable Development framework consisting of 17 Goals that address the key concerns of humanity and 169 interlinked Targets within these Goals that reflect the complex and interrelated nature of social, economic and ecological well-being parameters.

India has, over the past years, directed its development pathway to meet its priorities of employment, economic growth, food, water and energy security, disaster resilience and poverty alleviation. India has also aimed to restore its natural capital and adopt transparent and robust governance along democratic lines. However, emerging challenges of climate change impacts, increasing inequities, and lagging human development indices are well recognised by both the citizens as well as the government. The post 2015 UN Sustainable Development Agenda framework provides an opportunity to renew and integrate efforts in order to meet, to a significant degree, national and global aspirations in a defined time frame. Here we will be focussing on the financial requirements for achieving the SDGs. Administrative measures taken by the Government have not been covered in this paper.

The SDGs will have very significant resource implications worldwide. At the global level, total investment needs according to UNCTAD are in the order of USD 5 to USD 7 trillion per year. Total investment needs in developing countries alone could be about USD 3.9 trillion per year, mainly for basic infrastructure (roads, rail and ports, power stations, water and sanitation), food security (agriculture and rural development), climate change mitigation and adaptation, health, and education. Current investment in these sectors is around USD 1.4 trillion leaving a gap of around USD 2.5 trillion and implying an annual investment gap of between USD 1.9 and USD 3.1 trillion (UNCTAD, 2014).

4.1.1 India's Finance Gap

The first level of estimates, as prepared by the Ministry of Environment and Forests Government of India,²⁸ indicate a financial shortfall of INR 533 lakh crores (USD 8.5 trillion) over the mandated 15 years for achieving SDGs. Per year, on average, this works out to INR 36 lakh crores or USD 565 billion. (Note that this is only the gap in finance to achieve the SDGs, not the overall financial requirement). This is a minimalist estimate and the actual amounts are likely to be much higher. Trade will play an important role in meeting this funding gap. Though India is not an export led economy but even then Trade and Investment will pay a large role in achieving the SDGs.

4.2 Trade and SDGs

Here we will specifically deal with a few goals which have some direct linkages with Trade.

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture

Food security is influenced by a number of factors, including those that determine food availability domestic food production and the capacity to import food—as well as determinants of food access, including the distribution of food among various segments of the population. The financial requirement for India to meet its costs for food security is around INR 46 lakh crores (USD 729 billion) from 2015-24. This cost includes the financial requirements for providing access to safe and nutritious food for all. It also includes investments in irrigation, soil and water conservation, wasteland regeneration and rain-fed farming. Of the finances required for ensuring food security, the financial gap that India is estimated to face is of the order of

²⁸ Technology and Action for Rural Advancement, supported by UNDP and MoEF, Govt. of India, Achieving the Sustainable Development Goals in India- A study of Financial Requirements and Gaps, 2015.

INR 18.5 lakh crores (USD 293 billion) for access and distribution costs of food and for financing sustainable agricultural production systems.

This gap is likely to rise in the case of agricultural production, which shall require huge investments for an overall transition of the country to sustainable agricultural practices. Continuous shrinking of land for agriculture due to land demand for industries, infrastructure and cities may increase the costs of food security. Climate change may influence the availability of various resources for agriculture, further increasing the costs. Transition to sustainable agriculture systems is also likely to increase the food subsidy bill of the government due to a probable dip in the food production during the transition period. The financial gap numbers for food security (Goal 2) can be seen in the need for increase in budgetary outlays. Additional budgetary support required just for the implementation of the National Mission on Sustainable Agriculture up to the end of XII Five Year Plan (2017) was estimated by the Department of Agriculture and Cooperation, Ministry of Agriculture in 2010 to equal INR 1,08,000 crores (USD 17 billion).

In India, farming as a livelihood is becoming unattractive to people living in rural areas, particularly smallholder farmers and small to medium entrepreneurs, due to low priority, high input cost, no control on market, society's perception of farming as a poor livelihood option, etc. During 2002 –2003, for which the data is available, average income per farmer household was INR 11524 per annum, which turns out to be INR 960 per month per household. Also about 40 per cent farmer households in the country did not like farming because it is not profitable, risky and it lacks social status and felt that, given a choice, they would take up some other career.²⁹

In order to make agriculture an attractive and sustainable sector, key areas for investment and support include sustainable agricultural practices, rural infrastructure, storage capacities and related technologies, research and development on sustainable agricultural technologies, developing strong agricultural cooperatives and value chains, and strengthening urban-rural linkages.

The Target 2.b "Correct and prevent trade restrictions and distortions in world agricultural markets, including through the parallel elimination of all forms of agricultural export subsidies and all export measures with equivalent effect, in accordance with the mandate of the Doha Development Round" has been achieved as a WTO Ministerial outcome in Nairobi.

Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

For a sustained, inclusive and sustainable economic growth, India will require to enhance its MSME sector and other labour intensive sectors. It would require growth strategies that generate employment opportunities for its youth. In addition to this, for India to ensure sustainable economic growth it needs to look at costs of resource efficiency and promoting sustainable production systems.

IMF expects India to be the third largest economy in the world after US and China, with a growth rate of over 8 per cent, by 2050. India's MSMEs are likely to play a greater role than before in its holistic development (Varhad Group, 2013). MSMEs are contributing 12-13 per cent to GDP of India. The projected desirable contribution to India's GDP from MSMEs is ranging from 20-25 per cent. The finances required by MSMEs for such contribution is about INR 148 lakh crores (USD 2360 billion). Of this INR 148 lakh crores (USD 2360 billion), India is yet to find financial source for INR 105 lakh crores (USD 1672 billion).

Economic growth rate is controlled by a large number of factors not limited to the business cycle, investment, demographic changes, income equality, productivity of the workforce etc. Each of these factors is in turn dependent on other factors. Productivity of the workforce is dependent on the health, education and level of skills of the workforce as well as technology and the input mix used in production. Investment is

²⁹ National Sample Survey Report, Ministry of Statistics and Program Implementation, 2015.

dependent on factors such as political institutions, policy environment, ease of access to credit, ease of doing business and an endless list of other things. Economic growth also depends on fiscal and monetary policies of the government, as well as international trade. It is impossible to account for such complexities and provide a number for *finance required* to sustain economic growth. However, the achievement of all other SDGs – providing for universal education, healthcare, food security, skills, energy, sustainable industrialisation, urban and rural infrastructure etc. – would contribute substantially to the economic growth of the nation.

The cost of certain development oriented policies – in particular the cost of promotion of MSMEs, as has been outlined in target 8.3 – has been considered. In addition to these costs, it is expected that the "Make in India" campaign announced by the present government will also significantly drive economic growth, income generation and employment in the country by attracting much needed investments.

A caveat is in order here; sustained investment and economic growth does not guarantee decent jobs and full and productive employment for all, as the jobless growth phenomenon that recently swept India demonstrates. India's remarkable economic growth rate of 8.7 per cent per annum between 2004-05 and 2009-10 has had little impact on job generation. The Economic Survey 2013 has cautioned that by 2020, India could be faced with up to 16.7 million 'missing jobs'. India must ensure that the nature of its economic growth is sensitive to the needs of its huge population and is able to generate enough decent and productive work for all.

India's MSMEs are likely to play a greater role than before in its holistic development (Varhad Group, 2013). These enterprises help to build a thriving entrepreneurial ecosystem, in addition to promoting the use of indigenous technologies. The sector has exhibited consistent growth over the last few years, but it has done so in a constrained environment often resulting in inefficient resource utilisation. Even though the growth of MSMEs always outplayed the economic growth rate, it stands a long way from achieving its true potential. MSMEs are contributing towards 12-13 per cent of India's GDP. The projected desirable contribution to India's GDP from MSMEs ranges from 20-25 per cent according to the Varhad Group report. In order to sustain this growth there should be large scale integration of MSMEs with GVCs. This aspect has been dealt in a separate chapter.

Goal 12: Ensure sustainable consumption and production patterns

The methodology for the calculation of this goal has considered the financial gaps for 'low carbon strategies' as detailed out in April 2014 by the Planning Commission, with projections up to 2030 (Planning Commission, Gol, 2014). The cumulative costs of low carbon strategies have been estimated to be around INR 62.5 lakh crores (USD 992 billion), between 2011 and 2030. If these costs were borne entirely by domestic resources, the cumulative loss in output (GDP) between 2011 and 2030 would be USD 1,344 billion, at 2011 prices. The estimates do not yet take into consideration costs for waste management in a comprehensive manner or for financial requirements for new technology development and research and development for cleaner resource efficient production systems. Sustainable Consumption and Production (SCP) is a pre-requisite for the world's development to remain within the safe limits of growth and planetary boundaries. It is fundamental in order to achieve sustainable development.

India emitted 1,728 million tonnes CO2 equivalent of GHGs, making it the sixth largest emitter in the world. India is, however, conscious of its global responsibility, and in December 2009, it announced that it would reduce the emissions intensity of its GDP by 20 to 25 per cent, from the 2005 levels, by the year 2020. This voluntary commitment, which India has made to the international community, shows India's resolve to ensure that its growth process is sustainable and based on low carbon principles.

India's per capita consumption is still fairly low as compared with the developed economies. India sees sustainable consumption as an instrument for social and environmental gain. On one hand it will prevent the excessive burden on natural and environmental resources, while on the other it will also be a step towards a more equitable society. Sustainable consumption is a matter of great concern, with limited resources being wasted by a certain section of the world while depriving others of their basic necessities.

The cumulative costs of low carbon strategies have been estimated to be around INR 62.5 lakh crores (USD 992 billion), over the two decades between 2011 and 2030. If these costs were borne entirely by domestic resources, the cumulative loss in output (GDP) between 2011 and 2030 would be INR 100 lakh crores (USD 1,595 billion). India is striving to constantly improve resource and energy efficiencies in production patterns. India sees a leadership role that it can play across the world to promote and support countries, especially in the Global South in choosing sustainable patterns of production.

Goals 14 and 15: Conserve and sustainably use the oceans, seas and marine resources for sustainable development; Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

Target 11 of the Aichi Targets for Biodiversity Conservation states, "By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes" (CBD, 2010). For India to achieve this target as well as corresponding SDG goals, there are 2 kinds of costs: direct administrative costs and opportunity costs of protection. The total finance required is estimated at INR 31 lakh crores (USD 489 billion), while the finance gap is around INR 30 lakh crores (USD 481 billion).

In order to achieve SDGs we have to ensure that sustainability as a concept is embedded in all the businesses. Though it will be difficult to establish how the PSSs will help in achieving the SDGs but once these PSSs are adopted as National standards then they can really play a major role in achieving the SDGs. Let us also recognise the fact that it is not easy to make PSSs as the National standards as each aspect of the standard has a cost attached to it. That cost can sometime make the product less competitive in the market.

5. Shift towards sustainable consumption

At the World Summit on Sustainable Development (WSSD), held at Johannesburg, South Africa in 2002, changing unsustainable patterns of production and consumption was singled out as one of the main elements of sustainable development. WSSD called for fundamental changes in the way societies produce and consume goods and services and reiterated that all countries should promote sustainable consumption and production patterns, with developed countries taking the lead.

Sustainable consumption affects demand as it is about the kind and quantity of products we consume. Consumers might be unwilling to decrease their consumption unless they are educated on the impact their consumption patterns have on future generations. Therefore, they would have to be sensitized on the scarcity of resources and the consequences of wasteful use in production.

The United Nations Guidelines for Consumer Protection define sustainable consumption as "meeting the needs of present and future generations for goods and services in ways that are economically, socially and environmentally sustainable." The principles required nations to:

- Respect the earth and life in all its diversity; to care for the community of life with understanding and compassion
- Adopt patterns of consumption and production which safeguard human rights and community well-being as well as the regenerative capacities of the earth and to ensure that economic activities at all levels promote human development in an equitable and sustainable manner
- Encompass the principles of moderation and sufficiency as means of curbing social, economic and environmental imbalances and of stimulating responsible consumption

All members and organisations of society, including producers, suppliers, governments and consumers share responsibility for promoting sustainable consumption and need to be involved in the process.

The UN suggests,

"Governments should promote the development and implementation of policies for sustainable consumption and the integration of those policies with other public policies."

"Governments, in partnership with business and relevant organisations of civil society, should develop and implement strategies that promote sustainable consumption through a mix of policies that could include regulations."30

Consumers should take responsibility for demanding information on sustainable products and services and choosing such products that satisfy these criteria.

Implementation of sustainable development takes place most appropriately at the regional level. Regional sustainable development is influenced by the ability of enterprises, particularly small and medium entreprises (SMEs) to create strategies that confer sustainable competitive advantages on the local and global markets.

³⁰ United Nations Guidelines for Consumer Protection, p.8; available at: http://www.un.org/esa/sustdev/publications/consumption_en.pdf; accesed on 22 February 2017

Eco-labels can be useful tools to guide the consumers through their shopping behaviour. They provide information to consumers about product characteristics, particularly related to environmental factors. These might not be readily apparent. Environmental qualities are often experience or credence attributes. Consumers can verify given green products claims in some cases only after they have used the products. Further, they cannot verify if the claim the products make are true without consulting experts. Eco-labels provide warranties that the products or services comply with certain pre-determined environmental – and social criteria. Eco-labels also guide consumers in choosing products and services which are thought to be less harmful to the environment than other products within the same categories. These labels should also stimulate the development of products and services that are associated with a lesser environmental burden compared to equivalent products.

5.1 Changing Face of the Indian Consumer

Favourable demographic, economic, social and psychographic changes relating to India's consumer class are driving a consumption revolution in the country. The continuously evolving consumer segment in India is the youngest in the world with a median age of 24 as compared to other developed economies like the USA where the 'baby boomers' generation is now greying. With globalisation and almost five million Indian tourists travelling overseas every year, the exposure of Indian consumers to international brands has vastly increased. The promotion of India as a tourist destination has also led to foreign brands wanting to establish presence here.

Consumers today have greater purchasing power. Due to a proliferation of TV channels and growth of the world-wide web, they are now exposed to global media and brands. They have discovered products and services as well as lifestyles that emphasize the use of eco-friendly, sustainable products. The size of the family is becoming smaller as the number of nuclear families is on the increase and the decisions for marriage and having children are being delayed. The number of children in a family is reducing implying that there are fewer members to share the higher disposable incomes, making a better lifestyle more affordable and leading to a greater concern for improved health. With the spread of education and awareness, consumers are becoming increasingly concerned with using good quality products and the impact of their consumption on the society and the environment.

Special groups of consumers are keeping an eye on business and exerting pressure on it to become more environmentally and socially responsible. The workplace is becoming global and consumption preferences are, therefore, changing as exposure to new brands is received there. Changes are also taking place at the policy-making levels of policy making in response to the mounting international pressure to encourage sustainable production and consumption practices.

Consequently, the government is also encouraging greater efficiency in the use of energy and resources and promoting products that save energy or use renewable sources of energy. It is earmarking greater resources for promoting research and development in environmentally sound technologies, encouraging the use of renewable natural resources and the introduction of more environmentally sound products. Through its awareness campaigns, it is assisting individuals and households to make environmentally sound purchasing decisions. The government, in cooperation with industry and other relevant groups, is encouraging environmental labelling and other environment related product information programmes designed to assist consumers to make informed choices.

Market research suggests that sophisticated Indian consumers already place importance on whether products are sourced ethically and sustainably. A 2007 IMRB survey of 10,000 Indian socio-economic class (SEC) A, B, and C consumers showed that 30 per cent of consumers believe it is important that companies act ethically and 30 per cent would be willing to pay more for environmentally friendly products. A 2007 McKinsey and Co. study revealed that 42 per cent Indian respondents said that they would be more inclined to buy from food and beverage companies that developed more environmentally friendly products. A 2008 independent study identifies a "greener apparel" consumer segment, made up of 13 per cent Indian urban consumers, who are willing to spend more on certified, environmentally friendly clothing.

5.2 Consumer Survey on Sustainable Tea & Coffee Consumption

In 2010, Partners in Change in association with Solidaridad published a consumer survey³¹ on sustainable tea and coffee consumption, proposing how two basic beverages, i.e. tea and coffee, consumed the world over in considerable quantities must carry ecolabels, in other words, sustainability standard certifications.

5.2.1 Individual consumers

The survey revealed that most consumers drank both tea & coffee but men consumed more tea and coffee as compared to women. The consumption was generally less than two cups per day and rarely exceeded four cups per day. The consumption of coffee in cups per day was comparatively less than consumption of tea. The largest consumers of tea and coffee were found in the age group of 18-36 years, but the consumption of both the beverages declined with age. Consumption of tea & coffee was the highest amongst those who worked in the private sector, students and professionals.

The consumption of tea was higher as compared to consumption of coffee even amongst consumers reporting high family incomes. Further, women bought tea & coffee from multiple sources; and that while the young used multiple sources for purchasing tea & coffee, this tendency reduced with age. People patronised a single supplier as they grew older. More people in Bangalore used multiple sources as compared to those in Delhi. Higher education positively influenced the use of multiple suppliers. Professionally educated, however, preferred to purchase from a single supplier.

The occupational status also influenced store loyalty. The findings suggested that consumers belonging to the categories of students, people in private jobs and professionals used multiple sources to purchase their requirement of tea /coffee. The unemployed and the retired, however, purchased more from a single source. It was also observed that the use of single or multiple suppliers was not influenced by the income of the family except in case of consumers whose income was above Rs 10 lakhs. Such consumers used multiple sources to purchase their requirements of tea & coffee.

The five most important factors influencing the purchase of a brand for tea & coffee were taste, quality, flavor, certification, and impact on health. Family and price were also important considerations but the environmental or social concerns were not very important. Promotions and discounts, supplier familiarity, reputation of the suppliers and peers were the least important factors in the purchase decision. The survey revealed that family was the most important source of information on brands of tea & coffee, followed by television and print media. After these, came the advertisements and the more technical and reliable sources like comparative test reports, and research and development reports. Radio was the least important source of information in the consumption of tea & coffee.

The consumers were found indifferent towards the purchase of these beverages and did not take any significant interest in information related to the cultivation or processing of tea & coffee. The disinterest could also be due to the fact that the consumption of the two beverages was not very high and therefore, the budgetary allocation was not significant enough to merit attention. Only about a third of the consumers reported that though they had really never thought of proactively seeking information about the geographical facts regarding the beverages consumed by them, yet they were concerned with whether the farmers got a fair price, that the companies marketing the two beverages procured them from farmers following sustainable agricultural practices, and that these institutions themselves followed good labor practices for their employees. The consumers themselves however, were not sure whether they were empowered and could play a significant role in improving conditions around them to create a better world. About 50 per cent of the consumers were aware of sustainable tea & coffee.

³¹ Dr. Hanspal, S., with Viraf M. Mehta, Shatadru Chattopadhyay, Onkar Singh, Saji M. Kadavil, Bharathi Ghanashyam, Sujatha Ganesh, *Consumer Survey on Sustainable Tea & Coffee Consumption*, Partners in Change, 2010.

Consumers desired more information on the methods of cultivation, safety standards used, the social issues involved and the environmental 57 impact of cultivating tea & coffee. They also showed interest in the availability of such information on the internet. Only about 40 per cent were willing to pay up to 10 per cent extra for purchasing sustainable tea & coffee. About a third of these consumers were willing to pay extra if they were assured that the extra payment would result in benefits to the lives of farmers' children, less harm to the environment and that an independent party certified that the above conditions were complied with. The three most important hurdles in the purchase of sustainable tea & coffee by consumers were doubts regarding the truthfulness of quality claims, lack of information and the concern for such brands being value for money.

5.2.2 Institutional consumers

In institutions, automatic vending machines were the most popular followed by supply by an outsourced canteen as the second important way in which tea & coffee were made available to the employees. A majority of the institutions were found to use a single source to obtain supplies of tea & coffee and most of them purchased their supplies of the two beverages from wholesalers. In most institutions, the quantity of tea purchased was higher than the quantity of coffee purchased. The most important factors considered by the institutions in purchasing tea & coffee were the concern about impact of consumption of tea & coffee on the health, and therefore, concern for quality for both tea & coffee was high; the flavor in case of coffee and certification for both tea & coffee.

The survey revealed that most of the institutions did not have a well formulated procurement policy for tea & coffee; very few had a written code of conduct. None of the institutions reported that they specified to their suppliers what they would not buy or that the decisions or expenditure for supply of tea & coffee were open to public review. Further, feedback was received from employees on the time and the frequency with which tea & coffee was made available to them as also the quantity and the price at which it was available. The employees were interested in knowing whether the brands used for the two beverages were certified. Very little feedback was received on the names of brands of tea & coffee used and the quality of tea & coffee supplied to them. In case of both tea and coffee, the three most important sources for information were communication from suppliers, recommendation from procurement department of the institution and research reports.

The CSR department played an insignificant role in providing recommendation on using tea & coffee. Television was the least important medium but print media was important. No significant differences were found on institutional awareness regarding tea and coffee, but only a third agreed that they did make an effort to find out information on aspects related to growing and processing of tea & coffee consumed by them. More institutions were found to be aware of sustainable tea as compared to sustainable coffee

Even amongst institutions a majority were willing to spend up to 10 per cent extra for purchasing sustainable tea & coffee. The institutions reported that even though they could contribute to the adoption of sustainable farming and processing of tea & coffee, they would not be able to exercise pressure on the suppliers to actually supply the sustainable versions of the two beverages. They were not sure whether they would refuse to buy tea /coffee from suppliers if they were irresponsible towards environment or would change the suppliers if aware that they were following unethical or socially irresponsible business practices. Though they were not sure whether the management of their institutions would like to purchase sustainable tea & coffee, they felt that there would be no problem in paying more to purchase such tea & coffee.

The survey also revealed that in practice, they had neither started a dialogue with their suppliers for supplying sustainable tea & coffee, nor changed their suppliers if their behavior was irresponsible towards the environment or wanting on ethical grounds. The institutions felt that the most important problems they were likely to face in adopting sustainable tea & coffee were the lack of information regarding their certification; the continuous availability of brands satisfying the sustainability criteria and the genuineness of quality claims made by the manufacturers They failed to see that the consumption of sustainable products would improve their image in the eyes of the world or improve the company image in the eyes of the employees. The most important benefits they expected to achieve by introducing sustainable products were to encourage ethical practices and improve the health of their employees

Though a large number of institutions were using other sustainable products, like solar energy, energy efficient lighting and pollution control; almost 50 percent agreed that they would be able to implement purchase of sustainable tea & coffee within a year in their respective institutions, a large number were still undecided and a small number expected that they would be able to do so within two years. Thus, the results indicate that the purchase of tea & coffee was a 'low involvement' purchase decision for both the individual and institutional consumers of Delhi and Bangalore.

6. PSS for helping integration with Global Value Chains

Value chain governance corresponds to an organization's ability to define and enforce production parameters and product attributes. This includes the authority to control decision-making processes, dictate forms of horizontal coordination, verify performance and, last but not least, influence the distribution of revenues along the chain. Governance mechanisms are manifold and include formal (e.g. contracts) and informal (e.g. trust, values) instruments, control processes (enterprise resource planning, 'just in time'), information systems, structures and networks.

In general, there are two main reasons why firms aim to govern value chains. First, differentiated products allow firms to build competitive advantages beyond differentiation by price, including factors such as reliability of supply, product variety and quality and speed of innovation. Implementing this strategy requires close coordination and communication with suppliers to successfully meet changing product specifications and transmit information about market requirements. Second, pressure is increasing on final buyers to meet labour, environmental and product safety and quality standards. These factors do not necessarily require stronger value chain governance as long as suppliers are in a position to meet the demands. Yet, many suppliers lack the capacity and know-how to meet these demands and standards have an important risk mitigating function for final buyers.

PSS have played a crucial role in ensuring product safety and preventing fraud since the early days of the industrial revolution in the 19th century. However, there are different types of PSS that aim at achieving different purposes. Most PSS are B2B standards that are usually based on the principles of openness, transparency and consensus and they primarily focus on ensuring the quality and safety of the end-product in the value chain. These standards represent the foundation of international trade and as such they helped facilitate the integration of GVCs and thus greatly contributed to economic empowerment, technical innovation and consumer welfare. Becoming part of GVCs is crucial for developing countries in gaining access to crucial codified and tacit knowledge that eventually allows them to build up their own industries and increase their share in international trade.

Buyer-driven PSS that are dominant in the global retail industry may also be mostly focused on B2B transactions, but they are nevertheless different in the sense that the market power of global retailers in the demand-driven GVC of labour-intensive consumer products allows them to set their own terms of reference. While they also aim at ensuring the quality and safety of the end-product, their PSS tend to be process-oriented rather than product-oriented.

GLOBALG.A.P. is probably the most prominent example of a voluntary buyer-driven PSS system that has become a *de-facto* mandatory standard for importing agricultural products to Europe.

One could argue that these PSS largely follow the trend of national and supranational public standards that focus more and more on regulating processes and production methods, taking into account the social and environmental context in which a product has been produced. For example, the HACCP system is a typical example of a process-oriented food safety standard that has been adopted in most countries as a mandatory or voluntary standard.

National public standards, however, are bound by the principles of the WTO Agreement, no matter whether they are product or process-oriented. They need to comply with the principles of national treatment and most-favoured nation, ensuring that national public standards are non-discriminatory. As regards national public food standards, the SPS Agreement of the WTO requires them to be in line with the international food safety standards set by the Codex Alimentarius Commission. There are exceptions that allow for a temporary ban if there is not sufficient scientific evidence to ensure that the imported product is safe for domestic consumption – and there is Article XX of the GATT Agreement that allows for further exceptions (e.g. for offences against public morals) that can either be straightforward (e.g. a ban on pornography) or rather ambiguous (e.g. agricultural production methods that may not be considered sustainable).

Public standards dealing with food labelling, packaging requirements, and technical standards, including those dealing with production and processing methods, fall under the TBT Agreement of the WTO. This agreement stipulates under the GATT principle of non-discrimination that "like" products must be treated the same. Members should therefore ensure that labelling requirements, standards, etc. follow the same agreed international standards. The TBT Agreement, however, does not offer clear guidance on the legitimacy of process-based regulations (Josling et al., 2004). Mandatory food labelling standards exist in many countries and deal with multiple issues ranging from nutritional contents to GMO and organic labelling. The *de-facto* ban on GMOs in Europe has been a topic of dispute between the EU and the United States and resulted in a WTO ruling that faulted the EU regulatory process on 'undue delay'. Government-supported mandatory and voluntary labelling schemes on organic products or 'GMO free' products are also controversial and have the potential to lead to further trade disputes (precedents include the U.S. Shrimp–Turtle case, U.S.-Mexico Tuna–Dolphin case, and the US–EU dispute on Hormone-treated beef).

At any rate, public standards face the scrutiny of WTO member states which are likely to make use of the WTO dispute settlement mechanism if they feel discriminated against by national public standards. Many past WTO disputes have already dealt with public discriminatory standards and labels and provided some clarity about the legitimacy of process-oriented standards.

This is however not the case with PSS which are not subject to WTO disciplines. PSS that regulate the international trade in agricultural products are *de jure* 'voluntary standards' that are set by the respective retail companies or by an independent private standard-setting body or NGO, but in reality they have become *de facto* mandatory.

These buyer-driven PSS must however be distinguished as to whether they are B2B or B2C standards. B2B standards in the food chain are mainly set by independent third-party bodies and designed to ensure the safety and sustainability of supply-chain management as well as to reduce liability in the event of a food safety problem. B2C standards, in turn, may be based on B2B standards but they tend to be set by retail firms themselves, are proprietary in nature, and largely serve the purpose of reputation management and product differentiation. The labelled credence goods are not just meant to act as quality signals but also to communicate to consumers the 'goodness' of the company in terms of promoting sustainable agriculture and social values.

With that, the next essential question comes as whether buyer-driven PSS for food safety and food quality hamper or facilitate international trade. The argument that the extent to which they hamper trade is related to the burden of compliance costs. These can be significant, particularly if the PSS are *de facto* mandatory – especially in developing countries where public standards are already hard to enforce. Since producers in developing countries are expected to cover the costs of compliance themselves and since they can hardly count on public support in helping them to upgrade and invest in the necessary technical capacity required, there is definitely a risk that the smaller producers may be excluded from international trade, unless they become part of a larger production entity or enjoy the support of an external donor.

Moreover, the proliferation of private B2B standards in the regulation of trade in agricultural goods, on top of the already strict public standards, is likely to increase the administrative burden for suppliers, further strengthening the power of the buyers in the value chain (through barriers to market entry). Ultimately, they

may also offer only marginal benefits in terms of increased quality, fairness and safety, compared to the already existing public standards. However, compliance with the private B2B food safety and quality standards of importing countries may also have the positive effect of acting as a catalyst, driving infrastructure improvements and investment in developing countries. In this case, the effect could lead to an increase in trade flows. GLOBALG.A.P, in particular, has made some efforts to make it easier for developing countries to comply with its standards through more flexible arrangements such as provisions for national interpretation through a National Technical Working Group that would also make it easier to participate in international trade.

It is essential to highlight that not all developing countries face cost disadvantages caused by PSS, and some developing countries already benefit gains from being in a niche 'sustainability' market.. There appears to be a strong geographical variation in the usage of PSS: producers in Latin America countries (e.g. Colombia, Costa Rica, Ecuador and Peru) pro-actively use PSS to differentiate their coffee and bananas in international market. E.g. South America accounts for 25% of global production of bananas, and in that, 90% of the production accounts for sustainability standard-complying banana.

There is however some evidence that non-tariff trade barriers (e.g. high costs of compliance with public and PSS in affluent food importing countries) tend to account for the fact that least developed countries (LDCs), in particular, are unable to translate lower tariff-trade barriers into an increase in agricultural exports. For example, the EU's "Everything But Arms" arrangement (EBA), which offers full duty-free and quota-free access to the EU for all exports from LDCs, with the exception of arms and armaments, has been unable to substantially increase imports from these countries since its enactment in 2001.

Nevertheless, it can be expected that even LDCs will eventually be able to increase their exports once their governments embark on policy reforms that enable rapid catch-up growth through the improvement of infrastructure, public sanitation, and vocational training on a national scale, as well as more funding for technical assistance and advisory services in support of agricultural producers.

The true challenge may not be related to B2B standards, whether they are public or private, or supplier-driven or buyer-driven, but to the B2C standards that large retail firms increasingly attach to B2B standards in order to distinguish themselves, not necessarily with their consumers, but with the consumer and environmental advocacy groups that claim to represent them. These advocacy groups see agricultural trade and new agricultural technologies as part of the global sustainability problem rather than as an essential part of coping with the global challenges related to climate change and food security. Small-scale farmers in developing countries face different challenges to those faced by farmers in developed countries. They need economic and technological change to become sustainable, since they are at the beginning of the process of structural change in agriculture, not at the end, as in developed countries. Moreover, semisubsistence farming in developing countries is not a freely chosen life-style, as often portrayed in Western media, but rather reflects the lack of access to finance, education, training and technology that would enable impoverished farmers to eventually earn an additional income through increased productivity and off-farm employment that would ensure a better future for their children. Unlike in developed countries, where most people are worried about industrial farming and want the family farms to stay small, the problem with farming in developing countries, especially in India, is that farms are actually getting smaller due to high population growth rates in the countryside and lack of off-farm employment opportunities. This has become one of the major causes of deforestation and environmental degradation as well as hunger and malnutrition.

The WTO offers no mechanism for tackling the challenge posed by PSS, even though the SPS Agreement does ask members to take "reasonable measures" to ensure that non-governmental standardsetting bodies comply with the Agreement's principles. In 2003, St. Vincent and the Grenadines raised a concern at the SPS committee over requirements for EUREPG.A.P (now GLOBALG.A.P) certification. The discussions, however, focused primarily on issues of technical co-operation and strategies for facilitating compliance and did not really ask for the extension of WTO jurisdiction to cover PSS. Nevertheless, B2C labels, and their claim to legitimacy through their attachment to B2B PSS, need to become a topic for discussion in international trade negotiations

6.1 Certification and Compliance with International Standards

Sustainable management of GVCs has become an area of increased focus for companies because of competitive pressures triggered by increasing demands for quality and product certification, as well as for sustainable use of resources and sustainable environmental, labour, and social conditions of production. Consumers around the world increasingly demand products and services that are simultaneously good for the economy, the environment, and society – the triple bottom line of sustainable growth.

Incorporating sustainability standards into GVCs has become critical for companies to meet several objectives, (a) ensuring minimum standards in management practices, including in such areas as the health and safety of workers and minimum working age; (b) reducing business costs while maintaining the sustainability of business operations; and (c) sourcing materials that are environmentally and socially sustainable. These trends are therefore leading many companies to incorporate environmental, social, and governance requirements based on sustainability standards in contractual relationships with local suppliers. Suppliers that are able to meet those standards are more likely to enjoy increased demand and competitive e pricing for their products.

The rising number of quality and safety standards is, in part, driven by concerns about information, coordination, and traceability, which are more acute in a world dominated by GVCs. For firms in low-income countries, meeting the standards of global buyers and lead firms is often a necessary condition for being competitive. Compliance with sanitary and phytosanitary regulations is important, for example, for being competitive in agricultural trade.

Far more inhibiting than border rejections for international trade are the myriad of measures that preclude producers' countries from entering global markets. Research³² finds that technical regulations in agricultural trade significantly retard trade in some subsectors, but at the same time, well-designed regulations and conformity assessment procedures can facilitate trade. Standards can also facilitate trade if they can provide information to potential suppliers and overcome problems of informational asymmetry that would otherwise stifle exports.

One of the most important issues is about assessing the costs of complying with international standards as compared with the opportunity cost of serving regional markets. This is the case because adopting higher standards involves greater difficulties and challenges for SMEs and low-income countries than for larger firms and high-income countries. Increases in production and trade costs can originate from the required compliance with a multitude of standards and technical regulations. For this reason, sequencing may be important. Low-income countries and SMEs may first need to expand into the regional market to gain scale and learning economies and then adopt stringent international standards. A good strategy is for each country to apply its own standards, work toward establishing mutual recognition to spur trade, and progressively improve regional standards as the industry reaches scale and consumers demand higher quality.

The costs for SMEs and firms in low-income countries arise from the complexity and heterogeneity of international standards. Private firms in GVCs - whether as part of intra-firm trade, captive suppliers, or modular trade - increasingly set and transmit information about PSS, enforce their application as a condition of purchase, and often have a role in their formulation. Firms in countries seeking to enter foreign markets will have an advantage if they can affiliate with a GVC with native leadership in that foreign market. Nevertheless, in the most tightly controlled GVCs, standards constitute an important barrier to new competition that can be surmounted only through affiliation with a competing chain.

Moreover the multiplication of environmental and social sustainability and standards can also pose a barrier to entry to GVC participation by SMEs even in those cases in which standards are voluntary in the

³² Disdier, A., Fontagne', L., and Mimouni, M., *The Impact of Regulations on Agricultural Trade: Evidence from the SPS and TBT Agreements*, Amer. J. Agr. Econ. 90(2) (May 2008), p. 336–350.

country of end-product retail. The voluntary adoption of such standards by retailers with a major market share applies a de facto obligation up the supply chain (for example, Walmart's commitment to sell 100 percent Marine Stewardship Council-certified fish products).

To complicate matters further, private standard setting has gone beyond specifications for products to include production processes - often as firms have had to respond to consumers' concerns about labour conditions in factories. Branch name companies have found themselves susceptible to considerable reputational risk unless they ensure that their suppliers provide decent working conditions. For example, consumer protests led Nike to establish the Nike Code of Conduct, aimed at improving its contract factories. By 2005, the company disclosed its entire list of suppliers, and in 2007, it made public its auditing tools. More recently, Apple found itself under criticism for poor working conditions at Foxconn in China, one of the country's largest employers and a sole supplier of iPads. Apple took swift action to address the critiques, and Foxconn changed many of its practices governing overtime work and wages.

Those experiences and several studies point to the fact that PSS have been most effective when a lead firm with a differentiated consumer product can exert power over its supply chain.

In light of these conitions, it is imperative that the SME sector quickly embark onto the ZED journey. It is more so important because India aims to be the manufacturing hub under its 'Make in India' initiative. It is important that Indian industry meets global standards acceptable in the world market for this initiative to succeed. Indian policy makers and businesses need to look at this platform as an instrument to address various challenges and increase the participation of Indian companies in international supply chains.

6.2 Focus on Indian MSMEs and sustainability/business responsibility reporting

Due to the increasing integration of the Indian economy with the global economy, especially during the last decade, enterprises of all sizes have been gradually exposed to global competition. Global buyers are basing their sourcing decisions not only on traditional commercial considerations such as price, quality and delivery commitments, but also on compliance with social and environmental norms in the workplace, covering, for instance, health and safety, social equity in employment and production, and ecological compatibility of products and processes. Many Indian buyers too are beginning to incorporate these requirements into their purchasing decisions. For this, integrating sustainability in business, followed by calculable reporting of the same has become must, especially w.r.t. micro, small and medium enterprises (MSMEs).

However, in 2015, 89% of organizations that published sustainability reports were either large or multinational enterprises. Furthermore, 72% of private companies that reported on sustainability in 2015 are publicly listed. It is important to note that impact measurement is still a relatively new field, especially for MSMEs.

The small number of MSMEs participating in a sustainability reporting network like GRI is not surprising as they face completely different challenges (scarce resources, organizational structure, role of manager) than large companies and therefore need a completely different approach in terms of managing the resources and practices. At the same time this lack of presence appears to be problematic as MSMEs have a significant role in the Indian economy. This significant impact of SMEs in the economic and social dimensions implies that the sustainability topic is very relevant for them. At the same time, MSMEs are somehow 'excluded' from the most popular sustainability reporting framework Global Reporting Initiative (GRI) which leaves them out from the current trends in sustainability reporting. Even though MSMEs might practice sustainability in a quiet manner in their everyday activities, the rate is significantly lower than with multinational corporations and the benefits from those actions are not fully utilized by MSMEs.

MSMEs experience more difficulties when approaching sustainable development and that is mostly because of their different characteristics. They differ from large companies in the resources they possess – revenues, budgets, number of employees. Furthermore, the size of the enterprise affects its ability to report

sustainability performance i.e. larger companies report more often engagement in different social and environmental activities. Furthermore, the structure of SMEs and their ownership characteristics affect significantly the way companies approach sustainability meaning that more proactive owners are likely to prioritize sustainable development and the smaller size of the company results in quicker and more flexible implementation of changes.

The structure of the company can also be a limitation in the meaning of lack of managerial resources and specialists in particular areas. Last but not least, MSMEs' business culture can play a role in the decision for adopting sustainability practices as smaller companies tend to be unsure whether to allocate resources for activities beyond the usual business practices. Considering the characteristics of MSMEs listed above and the fact that most of the sustainability tools available today are suited for large companies, it is difficult for MSMEs to get engaged and it is understandable why they are excluded in the sustainability reporting worldwide.

One way of addressing this is to extend the business responsibility reporting existing for listed companies in India to the MSMEs through an information technology platform. We deal with this in the coming part.

6.2.1 Business Responsibility Reporting

As it exists in India, Business Responsibility Report is a disclosure of adoption of responsible business practices by a listed company to all its stakeholders. This is important considering the fact that these companies have accessed funds from the public, have an element of public interest involved, and are obligated to make exhaustive disclosures on a regular basis. The Securities and Exchange Board of India (SEBI), the regulator for the securities market in India, vide amendment dated December 22, 2015 to Regulation 34 (2) (f) of SEBI (Listing Obligations and Disclosure requirements) Regulations, 2015, has extended the applicability of Business Responsibility Reports to top five hundred listed companies from 100 listed Companies based on market capitalization as on March 31, of every year. Other companies are encouraged to use the Business Responsibility Report for making disclosures to their stakeholders. Business Responsibility Report has been designed to provide basic information about the company. Business Responsibility Report has been designed to provide basic information about the company, information related to its performance and processes, and information on principles and core elements of the Business Responsibility Reporting.

Business Responsibility Reporting is applicable to all types of companies including manufacturing, services etc. The principles of Business Responsibility Reporting are generic in nature and are applicable to all the companies.

In case of an MNC which has its subsidiary in India and which produces a single Global Reporting Initiative ('GRI') report, the subsidiary is required to prepare its separate Business Responsibility Report highlighting the responsible business practices it has put in place in India.

In case of an Indian listed company that already publishes a GRI report for its operations, Clause 5 of the SEBI Circular says that those listed entities which have been submitting sustainability reports to overseas regulatory agencies/stakeholders based on internationally accepted reporting frameworks need not prepare a separate report for the purpose of these guidelines but only furnish the same to their stakeholders along with the details of the framework under which their Business Responsibility Report has been prepared and a mapping of the principles contained in these guidelines to the disclosures made in their sustainability reports.

Extension to MSMEs

MSMEs can be mandated to submit Business Responsibility Reports suggested in a systematic framework. We learn from the system existing in India where businesses have to submit an evaluation report annually. The report has several parts, of which, the Part E is the most essential that requires Principlesbased evaluation of the business. The report incorporates basic parameters on which the business may report their performance. Efforts have been made to keep the reporting simple keeping in view the fact that this framework is equally applicable to the small businesses as well. The report may be prepared in a free format with the basic performance indicators being included in the same. In case the business entity has chosen not to adopt or report on any of the Principles, the same may be stated along with, if possible, the reasons for not doing so.

Following are the principles that are captured in the report and are in line with GRI's format as well:

6.2.1.1 Principle 1 – Ethics, Transparency and Accountability

- Governance structure of the business, including committees under the Board responsible for organizational oversight. In case no committee is constituted, then the details of the individual responsible for the oversight
- Mandate and composition (including number of independent members and/or non- executive members) of such committee with the number of oversight review meetings held.
- State whether the person/committee head responsible for oversight review is independent from the executive authority or not. If yes, how.
- Mechanisms for shareholders and employees to provide recommendations or direction to the Board/ Chief Executive.
- Processes in place for the Board/ Chief Executive to ensure conflicts of interest are avoided.
- Internally developed statement on Ethics, Codes of Conduct and details of the process followed to ensure that the same are followed
- Frequency with which the Board/ Chief Executive assess BR performance.

6.2.1.2 Principle 2 – Products Life Cycle Sustainability

- Statement on the use of recyclable raw materials used
- Statement on use of energy-efficient technologies, designs and manufacturing/ servicedelivery processes
- Statement on copyrights issues in case of the products that involve use of traditional knowledge and geographical indicators
- Statement on use of sustainable practices used in the value chain
- 6.2.1.3 Principle 3 Employees' well-being
 - Total number of employees with percentage of employees that are engaged through contractors
 - Statement on non-discriminatory employment policy of the business entity
 - Percentage of employees who are women
 - Number of persons with disabilities hired
 - Amount of the least monthly wage paid to any skilled and unskilled employee
 - Number of training and skill up-gradation programmes organized during the reporting period for skilled and unskilled employees

- Number of incidents of delay in payment of wages during the reporting period
- Number of grievances submitted by the employees

6.2.1.4 Principle 4 – Stakeholder Engagement

- Statement on the process of identification of stakeholders and engaging with them
- Statement on significant issues on which formal dialogue has been undertaken with any of the stakeholder groups
- 6.2.1.5 Principle 5 Human Rights
 - Statement on the policy of the business entity on observance of human rights in their operation
 - Statement on complaints of human rights violations filed during the reporting Period

6.2.1.6 Principle 6 - Environment

- Percentage of materials used that are recycled input materials
- Total energy consumed by the business entity for its operations
- Statement on use of energy saving processes and the total energy saved due to use of such processes
- Use of renewable energy as percentage of total energy consumption
- Total water consumed and the percentage of water that is recycled and reused
- Statement on quantum of emissions of greenhouse gases and efforts made to reduce the same
- Statement on discharge of water and effluents indicating the treatment done before discharge and the destination of disposal
- Details of efforts made for reconstruction of bio-diversity
- 6.2.1.7 Principle 7 Policy Advocacy
 - Statement on significant policy advocacy efforts undertaken with details of the platforms used
- 6.2.1.8 Principle 8 Inclusive Growth
 - Details of community investment and development work undertaken indicating the financial resources deployed and the impact of this work with a longer term perspective
 - Details of innovative practices, products and services that particularly enhance access and allocation of resources to the poor and the marginalized groups of the society
- 6.2.1.9 Principle 9 Customer Value
 - Statement on whether the labelling of their products has adequate information regarding product-related customer health and safety, method of use and disposal, product and process standards observed

 Details of the customer complaints on safety, labelling and safe disposal of the products received during the reporting period

6.3 The 'Make In India' connect with PSS

A key governance objective of the Government of India is to deliver economic growth and prosperity, tackle corruption, and improve the country's business infrastructure. A cornerstone of this strategy is the 'Make in India programme', a drive to get international companies across a range of sectors to manufacture their garments, automobile parts, electronics, and other products in India. While the initiative has generally been regarded as a success, it is said that India can unlock the full potential of attracting international investment and business if it can prove that it is a leader in corporate sustainability and responsibility.

Roel Nieuwenkamp, Chair of the Organisation for Economic Co-operation and Development (OECD) Working Party on Responsible Business Conduct, opined at an interview, *"If the Make in India strategy is going to be successful, companies have to take into account corporate responsibility. International companies will demand it, as they risk reputational damage, lawsuits, as well as pressure from investors and consumers if they fail to do so."*³³

6.3.1 'Make in India' objectives in line with sustainable development

The Indian MSME sector provides maximum opportunities for both self-employment and wageemployment outside the agricultural sector and contributes in building an inclusive and sustainable society in innumerable ways through creation of non-farm livelihood at low cost, balanced regional development, gender and social balance, environmentally sustainable development, etc.³⁴

Manufacturing sector contributed only about 15% of total GDP by the end of 2013-14 financial year in comparison to Agriculture and Services sector contribution of 25% and 60% respectively. In comparison, China's manufacturing sector contribution is 40%, Malaysia's 24%, Sri Lanka's 17%, Vietnam's 18%, and in all developed countries contribution is also more than India. Manufacturing sector being labour intensive sector has capacity to absorb large skilled, semi-skilled and unskilled manpower. Due to its large population, India is a labour intensive country. But in the last twenty years, only about 53 million job opportunities could be developed with a growth rate of about 1.87% per year in manufacturing sector, whereas, this figure was 150 million in services sector during this period.

One of the objectives of Make in India is to boost India's manufacturing sector and generate large scale employment opportunity for achieving targets of 25 per cent contribution to GDP with about 100 million additional jobs creation by the year 2022. The government has taken initiative of easing procedures to establish and do business in India and made rules simpler for investment in key sectors of the economy. To this end, budgetary provisions of 346.69 billion rupees have been made for the programme under Mahatma Gandhi National Rural Employment Guarantee Act with the objective of reducing poverty and unemployment among rural population. Mudra Bank has been setup for enterprises led by Schedule Castes/Scheduled Tribes (ST/ST) with an initial allocation of 200 billion rupees. There are plans to set up about 100 industrial cities and SEZs for helping the global corporations to set up their businesses and manufacturing plants resulting in increase in employment. Setting up of National Investment and Infrastructure Fund, Tax free infrastructure bonds for projects in the rail, road and irrigation sectors, setting up a Public Debt Management Agency (PDMA) to deepen the Indian Bond market, to provide additional fund raising avenues for infrastructure sector, taxation benefits in respect of Real Estate Investment Trusts (REITs) etc. are additional measures to fuel the Make in India initiative.

³³ Vaidehi Shah, Vaidehi Shah, *Why sustainability standards are important for India's growth*, Eco-Business, Published on 21 October 2016, available at: http://www.eco-business.com/news/why-sustainability-standards-are-important-for-indias-growth/; accessed on 24 February 2017.

³⁴ Deep Kapuria, MSME Sector: Epitomizing vitality, Make In India website, available at: http://www.makeinindia.com/article/-/v/nurturing-a-manufacturing-culture; accessed on 27 February 2017.

This immense boost in the manufacturing sector has had the government focus more on its commitment towards the SDGs and how through sustainable practices in these sectors and implementation of schemes, SDGs can be realised in India. If dealt with appropriately, PSS can play a huge role in integrating India producers and firms in the Global Value Chains and at the same time making India a global manufacturing hub, alleviate poverty through employment generation on a mass scale, eliminating discrimination from the society based upon caste, gender or religion and hence achieving sustainable development.

Box 1. OECD Responsible Business Conduct Guidelines for Multinational Enterprises

A useful toolkit that Indian firms and foreign businesses entering India can turn to is the OECD's Responsible Business Conduct Guidelines for Multinational Enterprises. This is a multilateral agreement with a Committee to oversee it. According to OECD, the guidelines are *"the most comprehensive set of government-backed recommendations on responsible business conduct in existence today"*.

Launched in 1976, the 95-page document recommends best business practices in areas such as the environment, employment and human rights, and taxation, among others. All 34 OECD nations and 12 non-member states adhere to the guidelines which are now in their fifth edition. This means that companies operating in, or originating from these 46 nations are expected to uphold the standards. Violations are reported and investigated through specially established committees in each country. Although the standards were launched some four decades before the SDGs were adopted, they have always had sustainable development as a core principle. There are numerous areas where the guidelines overlap with SDGs such as preserving life on land and water, clean energy, and achieving gender equality.

The 2011 update of the guidelines introduced new standards for supply chain responsibility. Indian companies and policymakers may take note of the OECD guidelines for standard-setting. Sectors like garments, agriculture or minerals are heavily export oriented, and many of the customers in these industries are located in countries that adhere to the OECD guidelines.

While multinational giants such as Tata, Nestle, and Unilever have the resources and clout to transform their operations and supply chains, smaller outfits may neither have the similar orientation or the resources. These smaller enterprises can amplify their impact by joining existing industry coalitions on responsible business.

With this backdrop of the Indian context, we now proceed to undertake evaluation of PSS in the PPGs selected for the study.

7. Product Group: Agri-Food (with focus on tea & grapes)

7.1 Why agri-food as a priority product group

Erosion of consumer confidence due to repeated instances of food scandals in already established food chains has fuelled the growth of PSS in the food market. The instances of heavy metals contamination, pesticide residues, Bovine Spongiform Encephalopathy, Avian Flu from current and new sources has led to consumer anxiety despite significant advances in the agriculture and food technology. The consumer needs additional assurance to address his own concerns over the traditional product controls. The PSS are

therefore formulated in a manner to address his anxiety. While the 'farm to fork' approach to handle food safety has drawn attention of securing the integrity of entire supply chains the repeated instances of breach of food safety has led to development of PSS that focus on controls over the processes along the value chain which triggers the development and gives impetus of private governance to production.

The reason for the proliferation is the trigger of large scales instances of food safety crises and the resulting bad press. While the governments reacted to the situation by instituting stricter regulations, the private industry came up with PSS that ensured that their suppliers are liable for any breach of food quality and safety. This increased the scope and the depth of PSS that only address the current issues of supply chains but also inserted clauses of traceability for securing quality in backend supply chains. The other objective of private standard was to improve their "brand value" by promoting the value their standards add.

In food sector, it has been seen that the public food quality and safety regulations are becoming more performance and process oriented increasing the onus of creating and maintaining effective food quality control on the food processor. However, globally it is seen that the PSS in food are focussed on mitigating regulatory and reputation risks faced by the processors and are increasingly being used to facilitate competitive positioning in higher value food markets through product differentiation based on increasing array of food quality attributes.³⁵

For this purpose, we attempt to understand the product group of agricultural produce with special focus on food; we take the sample study of tea and grapes as products under this product group to understand the treatment and impact of PSS to the larger group. Among these, the Trustea experience in tea, and the GlobalG.A.P. experience in grapes have been considered.

7.2 Tea

Tea production is one of the oldest and most established industries in India and is of considerable importance to the national economy. India is responsible for nearly one-third of global tea production, the remaining production taking place mainly in other developing countries in Asia. Foreign markets have become increasingly important for Indian tea export, with about INR 9200 Crore worth of tea being exported each year.

Tea had been known for millennia in India as a medicinal plant, but was not drunk for pleasure until the British began to establish plantations in the 19th century. Darjeeling tea, from the Darjeeling region in West Bengal has traditionally been prized above all other black teas, especially in the United Kingdom and the countries comprising the former British Empire. The Chinese variety is used for Darjeeling tea, and the Assamese variety, native to the Indian state of Assam, everywhere else.

The British colonial rule in India initiated commercial tea plantations in India and in Ceylon. In 1824 tea plants were discovered in the hills along the frontier between Burma (Myanmar) and the Indian state of Assam. The British introduced the tea culture into India in 1836 and into Ceylon (Sri Lanka) in 1867. India was the top producer of tea for nearly a century, but was displaced by China in the 21st century. Indian tea companies have acquired a number of iconic foreign tea enterprises including British brands Tetley and Typhoo. While India is the largest consumer of tea worldwide, the per-capita consumption of tea in India remains at a modest 750 grams per person every year.³⁶

7.2.1 Indian Tea

³⁵ Smith G., *Interaction of Public and Private Standards in the food Chain*, OECD Food, Agriculture and Fishing Papers, OECD (2009).

³⁶ Dr. Hanspal, S., with Viraf M. Mehta, Shatadru Chattopadhyay, Onkar Singh, Saji M. Kadavil, Bharathi Ghanashyam, Sujatha Ganesh, *Consumer Survey on Sustainable Tea & Coffee Consumption*, Partners in Change, 2010, p. 18.

Tea is cultivated in the high ranges of North and South India and the best quality is known as CTC and Orthodox Assam Tea, respectively. The consumption is above the 600 million kg mark per year. The market consists of both leaf and dust teas both in the CTC and Orthodox Grades, with the southern markets consuming more dust teas. Nearly every part of the country has a tea-growing region. Approximately 4 per cent of the national income of India comes from its tea and India is home to over 14,000 tea estates. The geography of India allows for many different climatic conditions, and the resulting teas can be dramatically different from each other. There are three main kinds of tea produced in India:

- 1) **Assam tea** comes from the north-eastern region of the country. This heavily forested region is home to much wildlife, including the rhinoceros. Tea from here is rich and full-bodied. It was in Assam that the first tea estate was established, in 1837.
- 2) Darjeeling tea comes from Darjeeling, in the state of West Bengal eastern part of India. Darjeeling is cool and wet, and tucked in the foothills of the Himalayas. The tea is exquisite and delicately flavored, and considered to be one of the finest teas in the world. The Darjeeling plantations have three distinct harvests, and the tea produced from each 'flush' has a unique flavour. First flush teas are light and aromatic, while the second flush produces tea with a bit more bite. The third or autumn flush gives a tea that is lesser in quality.
- 3) Nilgiri tea comes from an even higher part of India than Darjeeling. This southern Indian region has elevations between 1,000 and 25,000 metres. The flavours of Nilgiri teas are subtle and gentle. They are frequently blended with other, more robust teas.

7.2.2 Indian tea export market

The export market for Indian teas is mainly in the Russian and CIS countries.³⁷ This is equivalent to 43 per cent of India's tea exports. The other countries that import Indian tea include most of the European Countries, U.S.A., Japan, West Asia and the Asia Pacific region. In fact, there is hardly any country where Indian tea is not exported, OECD member countries, in particular the United States, Japan, and members of the European Union account for 40 per cent of global imports. It is therefore vital for India to competitively retains these traditional markets for its teas. In doing so, any threat to India's overseas tea markets must be taken extremely seriously.

Figure 4. Tea exports of India in 2015 by month (INR in Crores) | Source: Ministry of Commerce & Industry Dashboard

³⁷ Dr. Hanspal, S., with Viraf M. Mehta, Shatadru Chattopadhyay, Onkar Singh, Saji M. Kadavil, Bharathi Ghanashyam, Sujatha Ganesh, *Consumer Survey on Sustainable Tea* & *Coffee Consumption*, Partners in Change, 2010, p. 19.

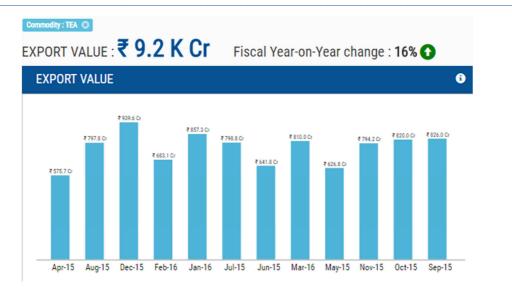
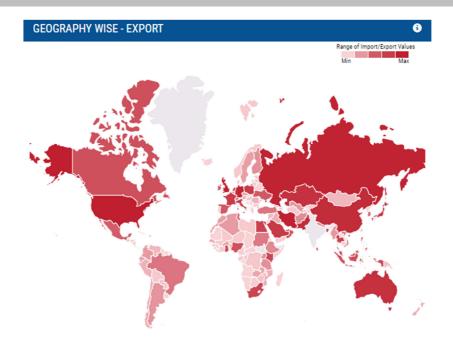


Figure 5. Tea exports of India by world geography I Source: Ministry of Commerce & Industry Dashboard



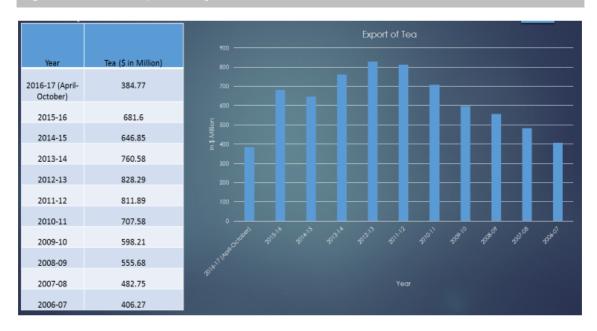
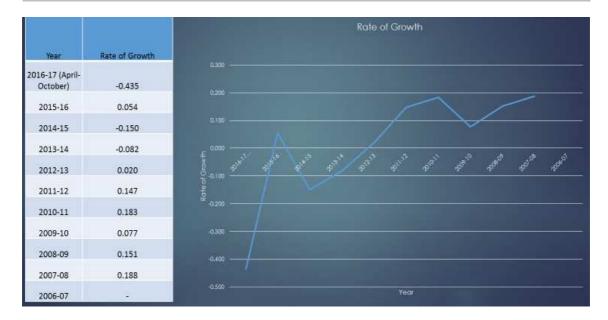


Figure 6. India's tea exports through 2006 - 2017

Figure 7. Rate of growth of India's tea exports (2006 - 2017)



7.2.3 Tea Board of India

The genesis of the Tea Board of India dates back to 1903 when the Indian Tea Cess Bill was passed. The Bill provided for levying a cess on tea exports - the proceeds of which were to be used for the promotion of Indian tea both within and outside India. The present Tea Board set up under section 4 of the Tea Act 1953 was constituted on 1st April 1954. It has succeeded the Central Tea Board and the Indian Tea Licensing Committee which functioned respectively under the Central Tea Board Act, 1949 and the Indian Tea Control Act, 1938 which were repealed. The activities of the two previous bodies had been confined largely to regulation of tea cultivation and export of tea as required by the International Tea Agreement then in force, and promotion of tea consumption. The present Tea Board functions as a statutory body of the Central Government under the Ministry of Commerce. The Board is constituted of 31 members (including the

Chairman) drawn from Members of Parliament, tea producers, tea traders, tea brokers, consumers, and representatives of governments from the principal tea producing states, and trade unions. The Board is reconstituted every three years and has its headquarters in Kolkata.

The Tea Board of India is responsible for the assignment of certification numbers to exports of certain tea merchants. This certification is intended to ensure the origin of the tea, which in turn would reduce the amount of fraudulent labelling on rare teas such as those harvested in Darjeeling. Tea Board India's tasks include endorsement of the diverse production and productivity of tea, financial support of research organizations and the monitoring of advances in tea packaging as it relates to health beneficial aspects.

7.2.4 Supply Side Interventions in form of government regulations

The most significant legislation governing labour standards and working conditions in plantations is the Plantation Labour Act of 1951. The other relevant legislations are the Factories Act of 1948, Workmen's Compensation Act, Industrial Dispute Act 1947, Minimum Wages Act of 1948, Employers' Provident Fund Act, Industrial Employment Act, Payment of Bonus Act, Maternity Benefits Act of 1961, and Employers' Social Insurance Act. Among these, the Plantation Labour Act regulates employment, working conditions and working hours, and forms the principal basis of legal entitlement of the workers.

The Plantation Labour Act, 1951 (PLA) applies to any land used or intended to be used for growing tea, coffee, rubber, cinchona or cardamom or any other plant which measures five hectares or more and in which 15 or more workers are employed on any day of the preceding 12 months. Despite various provisions related to workers' welfare present in the PLA, 1951, it remains silent on two key aspects, i.e. environmental issues and occupational health and safety norms. It also legalizes working of adolescents (between the ages of 14 and 18 years) at a cheaper rate than adult workers. Also, many provisions of PLA have never been implemented or only partially implemented in the big company owned plantations. Moreover, the regulations do not cover small plantations employing less than 15 workers.

7.2.5 Concerns in the tea sector

7.2.5.1 Pesticide content

In recent years, concern has been growing about the level of pesticide residues in Indian tea. Germany, for instance, has made complaints about the high residue levels of ethion in Darjeeling teas. Complaints have also been received about Assam, Terai and Dooars teas containing high levels of bicofol. In early 1994, there were fears that German tea importers would stop imports of Indian tea. In a submission to the WTO's Committee on Trade and Environment, India implicitly questioned the balance between trade restrictiveness and protection in respect of an MRL for pesticides in tea, thereby confirming affected trade due to these concerns:

"...[India's] tea exports have been affected due to developed countries' concerns about *pes*ticide content. Although Indian exporters adhered to the maximum pesticide residue levels recommended by US Environmental Protection Agency (EPA), stricter limits ... imposed in some European countries became insurmountable, there being, apart from other problems, a cost of USD 234 per analysis."38

There is no doubt that unless the Indian tea industry responds to these worries and ensures that the residue levels are reduced, exports of Indian tea will be seriously affected. The Tocklai Tea Research Association has issued a range of guidelines encouraging growers to take action to reduce the chemical residue content of their teas. These guidelines advocate spraying under proper supervision, spraying before plucking or spraying immediately after plucking, discarding the tea that is plucked immediately after spraying, the application of prophylactic treatments during the non-productive period, rotation of chemicals,

³⁸ Communication from India, *The study of the effects of environmental measures on market access*, WTO Committee on Trade and Environment Special Session, WT/CTE/W/177, 27 October 2000.

and integrated pest management approaches. The guidelines and other information has been disseminated through various workshops in training programmes. In addition, the government has banned the application of DDT, BHC, Aldrin, aldrex, endrine, heptachlor, chlordane and tetradifon. Moreover, if chemicals such as thjiomton, dimethoate, malathion, fen cypermethrin, carboxin etc. are applied during the plucking season, the government's guidelines provide for discarding the plucking that immediately follows the spraying. Further, the Bureau of Indian Standards (which is the standards body in India) has selected tea as one of the food products eligible for the 'Eco-Mark' certificate, as long as certain conditions are complied with.

7.2.5.2 Child labour

Another area of concern is the use of child labour in the tea plantations. Under the Indian Plantation Labour Act 1951, the employment of children aged 12-15 on tea estates is permissible. In tea factories, however, children must be aged 14 years or above. Nevertheless, the Child Labour Prohibition Act 1986 permits an exclusion for tea production because the limited use of child labour is not considered a social problem. The Indian tea industry is gradually discouraging employment of child labour in tea estates. Notwithstanding these legal provisions and their observance on the part of the tea industry, it is noted that children often accompany employed adults in the fields. Given the socioeconomic situation and the need for children to be with their parents during the day, it appears difficult to find ways of avoiding this.

7.2.5.3 Packaging

Indian teas have also been affected by the German Packaging Ordinance, which has required changes in the types of packaging materials used in the tea industry. Aluminium packs, for example, have been replaced by paper packs.

7.2.6 Trustea Case Study

The India Sustainable Tea Program (known as, trustea) seeks to sustainably transform around 500 million kg of tea. Current funders are Hindustan Unilever and IDH – The Sustainable Trade Initiative. Solidaridad is the implementing partner for the program. Rainforest Alliance is involved as technical advisor. The 5-year program runs from 2012-2016 and aims to target 600+ factories, 500.000 tea plantation workers and 40,000 smallholders. The main objective of this programme is to develop a meaningful, cost effective code that is practical to implement in the Indian realities at the same time it shall not compromise on globally accepted core sustainability principles.

The trustea Code is designed to evaluate the social, economic, agronomic and environmental performance of Indian tea estates, smallholders and Bought Leaf Factories (BLFs). The programme expects that the compliance with the code not only improves competitiveness of the tea farms but facilitates the tea farms in achieving compliance with national regulations and international sustainability standards in a step-wise approach. The applicable control points under each chapters are required to be adhered to within a three year period, resulting in full compliance by end of year 3. The India tea code allows producers to show that they operate responsibly – producing quality tea according to strict social and environmental standards. The verification under the code provides manufacturers with the assurance of responsible production and provides opportunities to credibly demonstrate this to their customers.

The main focus for the program is to accelerate transformation of the Indian tea market in close partnership with tea industry stakeholders. It includes the development and implementation of a cost effective and practical to implement sustainability code based on Indian realities but without compromising on globally accepted sustainability principles. The India specific sustainability tea code will be developed from the industry, by the industry and for the industry.

7.2.6.1 Audit Protocol

The draft version of the audit protocol as received from Quality Council of India was reviewed in February 2016 and discussed. On receiving the feedback from the members the protocol was updated and issued for printing in April 2016. The soft and printed version of the updated audit protocol was mailed on 6th May 2016 to all the CBs, farmer support centers and all members of TPC and it was also uploaded in the

trustea website. Implementation Guides were reviewed and printed. Sufficient copies were distributed to the farmer support centers for onward distribution to the designated trustea officers of the trustea verified organisations. 216 Implementation Guides have been distributed to the trustea officers and rest would also receive in due course of time.

Box 2: Introduction to trustea Code criteria

Parameters introduction

The code is designed towards a progressive achievement of complete compliance by the year 3. The "Mandatory" (highlighted in red under respective chapters) and "Other Criteria" have been divided into 4 segments covering 11 chapters of the code.

Segment I: Chapters 1 and 2

Segment II: Chapters 3 to 6

Segment III: Chapters 7 to 9

Segment IV: Chapters 10 and 11

The total Mandatory and Other Criteria points applicable under each segment shall be as under:

Segment	Chapter	Mandatory Criteria	Other Criteria
I.	1-2	4	8
Ш	3-6	20	11
Ш	7-9	36	12
IV	10-11	8	6
To	tal	68	37

Table 1: trustea - Mandatory and Other Criteria - Chapter-wise segregation

In each segment, the verified unit will need to meet 100% of the mandatory control points and 50% other criteria in year 1, 65% in year 2, 80% in year 3. If a control point is not applicable, it will have to be adjusted accordingly for percentage of the control points required for verification. But a not applicable control point will not get an additional percentage point. The total compliance percentage points (Mandatory and Other Criteria) in **year 1: 82%, year 2: 88% and year 3: 93%**. Further, there will be 0.5 marks for minor non-compliances if the auditors can assure that the unit is progressing towards full compliance.

The certificate holder will be either a tea company, bought leaf factory or producer groups of small tea growers having their own factory for processing or having a tie up with any other factory for processing. The code will cover all aspects of production and manufacturing. The entry-point of the code for compliance will be the factories in estates, BLFs or factories owned by producer groups.

7.2.6.2 Control Audit (System Assurance Audit)

In compliance with the decision taken by the tPC at its meeting held on 8th April 2016, the secretariat initiated necessary follow up action to complete the System Assurance audit of ten trustea verified organisations by end of June 2016. Prior to commencement of the audit, all the verified organisations were sensitised as to the scope of the audit, its importance for upholding the credibility of the verification process being undertaken under the trustea programme. All the CBs have also been briefed and they have been

advised to depute one of their auditors to join the System Assurance Audit programme as observers. Audits were carried out from 17th to 24th June 2016 in four units each in Assam and North Bengal and two in South India.

Selection of the entities for control audit was based on combination of several parameters viz: the geographic region, age of the verification done, share in the total volume verified of implementation partners (Solidaridad & ETP), Estate and BLFs, commercial partners and the certification bodies. It may be noted that nine CBs have been empanelled with the trustea secretariat of which 8 have undertaken verification audit.

7.2.6.3 Impact outcome

Latest trustea KPIs (cumulative as on 31 December 2016) stand as follows:

Table 2. trustea – Market Impact

Indicators	Quantities
Total volume of certified tea available (m. kilos)	371.21
No. of tea estates/ marks verified	412
No. of smallholders certified under Indian code	25565
No. of workers reached (certified marks)	350142
No. of hectares under tea certified under Indian code	222026.293
No. of verified women smallholders	5264

7.2.6.4 Key Future Challenges & Threats

trustea has identified the following as key challenges and threats that need to be addressed in future and right from the start of the next phase of the trustea programme:

- Direct support from Tea Board of India
- Lack of perceived benefits for the suppliers to join trustea
- Trustea seen as two companies' private initiative
- Over emphasis on volume targets
- Complex and slow decision making
- No agreement on market introduction of trustea
- Lack of success with BLFs and STGs
- Significant number of gap assessed entities yet to be verified
- Lack of impact on worker's lives (living condition, health and sanitation) might attract media attention and negative publicity
- Lack of clarity on the adequate future revenue, its source and tax exemption status

7.2.6.5 Support from Statutory Agencies

Box 3: Statutory body supporting sustainability standard in tea | Foreword to the Plant Protection Code, Tea Board of India

Foreword to the Plant Protection Code (January 2017, Ver. 8.0) Policy on usage of Plant Protection Formulations in Tea Plantations of India *issued* by the Tea Board of India

Consumers are now increasingly demanding products produced sustainably without adversely impacting the environment. Given this demand, the need to embrace sustainability becomes more and more important. Tea Board is, therefore, focusing on developing sustainable tea code based on Indian realities and globally accepted sustainability principles. Towards this end, the Board has launched a 'trustea code' on 11th July 2013 which is designed to evaluate the social, economic, agronomic and environmental performance of tea plantations in India. The code covers all aspects of tea production and manufacturing.

It is envisioned that the compliance with the code will not only improve competitiveness amongst the tea farms but will also facilitate them in achieving compliance with national regulations and international sustainability standards. One of the important components of the code is safe usage of plant protection products and adherence to safety standards for production of safer, healthier and more environmentally friendly teas.

Tea Board is of the view that effective adoption for the food safety standards will enable the tea industry in safeguarding the plantation environment, welfare of the workers and small farmers and long term security of supply. Given this objective and in order to sustain the ever-increasing appetite for Indian tea amongst the consumers, the need for judicious usage of Plant Protection Formulations (PPFs) has become more imperative.

With Support from Tea Board, the Tea Research Institutes (TRIs) in India - Tea Research Association (TRA) for North East India and UPASI Tea Research Foundation (TRF) for South India have after due experimentation and testing the efficacy of PPFs, have come out with firm recommendations for adoption of Integrated Pest Management practices for achieving effective control of pests and diseases with minimal use of PPFs that are safer to use in the tea plantations.

The TRIs have ensured that their recommendations comply with food safety standards as stipulated by FSSAI (Food Safety & Standards Authority of India) and the PPFs recommended for usage have been cleared by the Registration Committee of Central Insecticides Board (CIB) formed under the Insecticide Act 1968 which has the responsibility to check the data requirement of new pesticides and to ensure that pesticides allowed for use will not leave excessive residues on food commodities above the permitted maximum limits. It also liaises with international bodies like EPA and FAO/WHO, Codex etc. committees on harmonization of pesticide residues.

This document 'Plant Protection Code' is being issued to the tea industry as a comprehensive guideline for safe usage of Plant Protection Formulations (PPFs) in the tea plantations in India.

Santosh Sarangi Chairman Tea Board of India

7.3 Grapes

Grape is grown from cold temperate to warm tropic regions; however, hot and dry climate is ideal for viticulture. Indian grapes vary in color, size and other characteristics and are produced across India. Maharashtra ranks first in terms of production accounting for more than 82.56% of total production with the highest productivity in the country. Grape covers an area of 116 thousand hectares occupying 1.70% of the total cultivable area in India. India is a major exporter of fresh Grapes to the world (Netherland, United Kingdom, Russia, United Arab Emirates and Saudi Arabia) and in 2015-16 the export quantity was 1,56,218 MT of Grapes worth Rs. 1,551 crores.

Since 1960, much has been done to ensure that the grapes sector is growing and developing to keep up with domestic and international markets. However, new challenges now face the sector including but not limited to vagaries of weather, unavailability of skilled labour, depleting soil health, competition in markets, high cost of production, decreasing availability of resources, and unsustainable practices of cultivation.

The grape sector in India contributes a great deal to the agricultural economy and since the sector includes various stakeholders such as grape growers, wineries and allied industries like cold storage, cold chain transport, packaging, manufacturers and suppliers of agrochemicals and inputs, drip irrigation systems, trellises fabricators and exporters, many livelihoods depend upon it. It is thus in the best interest of the whole industry to move towards making the grapes sector more sustainable.

Sustainability has become strongly associated with mitigation of sourcing and reputational risks for a company. Participating in sustainability is no longer optional for organizations, but rather a real and increasingly important component of core business. Some of the major sustainability challenges for the grapes sector in India focus on decreasing profitability of smallholders' misuse of agrochemicals and inputs, and sub-standard working conditions and livelihoods of growers and workers alike.

7.3.1 Grapes trade patterns

Worldwide production of table grapes is in excess of 21 million tons and shows a growing trend over the last decade. The countries involved in production exceed 50, with China producing 12% of global production, followed by Italy (9.1%), the USA (8.7%), France (7.6%), Spain (7.4%), Turkey (5.5%), and Chile (4%).³⁹ In recent years, these countries have been affected by different dynamics: particularly, among the leading countries China and Turkey have shown an increasing trend, Iran, Italy and others have shown stability or, in some cases, a decrease in production; moreover, it is important to highlight that Peru, while not being part of the main producing countries, is experiencing an upward trend with a strong export orientation.

In recent decades, market shares have largely evolved, gained and been lost by exporters with great swiftness. There has been an increase in the share of exports from both a group of countries which, whilst being traditionally among the main producers, were exclusively oriented to the domestic market, such as China, Turkey and India, and a group of countries which are not yet included among the top ten producers such as Mexico and Peru. In other words, nowadays the main global exporters are not only many of the traditional producers, but also those where the production of table grapes has developed more recently. As a result, new players have emerged and overturned the economic geography of grapes trade leading to an increase in competitiveness on the international market.

³⁹ FAO, 2012.

Year Country	1961-1970	1971-1980	1981-1990	1991-2000	2009-2012
China	0.2	0.2	0.8	3.3	11.8
Italy	19.9	19.1	16.6	15.6	9.1
USA	6.2	6.7	7.9	9.5	8.7
France	18.7	17.6	14.1	12.1	7.6
Spain	8.1	9.0	8.6	8.4	7.4
Turkey	6.4	5.8	5.3	6.0	5.5
Chile	1.6	1.6	1.6	2.5	4.0
Argentina	5.1	5.3	4.6	3.9	3.6
Iran	1.0	1.5	2.3	3.4	2.8
South Africa	1.4	1.5	1.9	2.3	2.3
Australia	1.2	1.2	1.3	1.7	2.2
Brazil	1.0	1.0	1.0	1.4	1.9
Egypt	0.2	0.4	0.7	1.4	1.7
Germany	1.5	1.9	2.2	2.4	1.5
India	0.2	0.2	0.5	1.3	1.4
Uzbekistan	0.0	0.0	0.0	0.0	1.4
Greece	2.8	2.5	2.4	2.1	1.2
Portugal	3.1	2.4	1.9	1.7	1.1
Romania	1.8	2.2	2.2	1.9	1.0
Republic of	0.0	0.0	0.0	0.0	0.7
Moldova					

Table 3. Main producers of Grapes – market share (%) for selected time periods

Source: FAOSTAT.

Table 4. Current and past main exporters of Grapes by market share (%)

Year	1961-63	0000 0011	
Country	1901-03	2009-2011	
Chile	1.00	21.55	
USA	11.91	12.07	
Italy	23.94	11.96	
Netherlands	0.25	7.57	
South Africa	3.76	6.76	
Turkey	0.77	5.77	
China	0.09	5.38	
Mexico	0.03	3.85	
Spain	10.21	3.38	
India	<0.01	2.80	
Peru	<0.01	2.21	
Egypt	0.01	2.18	
Uzbekistan	NA	2.06	
Greece	2.79	1.91	
Brazil	<0.01	1.53	
Argentina	0.70	1.38	
Afghanistan	1.61	0.52	
France	4.45	0.42	
Hungary	3.34	0.04	
Bulgaria	22.21	0.03	
Romania	5.89	0.01	
Algeria	2.13	<0.01	

Source: FAOSTAT.

Chile is the world's leading exporter accounting for more than 21% of the export market share in 2009-2011 (Table 4). The main destinations are North American countries (USA, Canada and Mexico), Europe (mainly the Netherlands and United Kingdom) Asia (Hong Kong and Japan) and other South American countries. Chilean and North American grape harvest schedules are complementary, so that consumers in the NAFTA region are provided with winter imports of grapes from Chile (Plattner and Perez, 2013).

The United States, which follows Chile with a world export share of 12% in 2009-2011 (Table 4) exports grapes mainly to Canada, Mexico and East Asian countries during summer and autumn, while import nearly 90% of fresh grapes from Chile in winter and spring, when also a small amount is imported from Mexico, helping to extend supply on a year-round basis. US grape imports were very low and fairly constant during the 1950s, 1960s, and much of the 1970s; since the early 1980s they have risen steadily, boosted by imports from Chile which increased almost eightfold in value between 1980-1994 (Alston et al., 1997). Currently, table grapes are considered a staple in US food retailers and its year-round availability has accounted for its increase in consumer demand.

The European Union plays an important role both in table grape production, with Italy, Spain and Greece accounting for 93%, and in trade with Italy, the Netherlands and Spain as main exporters (Table 4). The Netherlands, fourth in the world with 7.6% market share, is also the largest European importing country serving mainly as a trans-shipping point of grapes year-round from both hemispheres not being a producer. The EU-28 is a net importer of fresh table grapes, with South Africa and Chile the leading suppliers (almost 168000 tons and 123000 tons, respectively in 2013) followed by Egypt (53,193 tons), **India (51,272 tons)**, Peru (40,464 tons), Brazil (38,548 tons), Turkey (23,007 tons) (USDA, 2013). After a dramatic fall in the last decade, the European cultivated area continues to decrease because of reduced profitability, due to increasing production costs and emerging competition from suppliers located in extra-EU countries.

Italy is the main European producer and exporter and ranks third in world's export share (12% in 2009-2011) following Chile and the US (Table 4). Production is supplied from May to December and mainly exported to Germany, France, Poland, Russia, Switzerland and the UK, where Italian grapes compete with the production from US. During winter and spring Italy imports from Spain, the Netherlands, Egypt and Chile. Spain is the second European producer country for exports, shipping over 85% of its exports within the EU: United Kingdom, Germany, Portugal, France and the Netherlands. The main suppliers of the Spanish market are Italy, Chile, France, South Africa and Peru. Greece, as the third European producer-exporter, has a harvest schedule from late July to the end of September providing continental markets: Germany, United Kingdom, the Netherlands and Eastern European countries such as Poland, Macedonia, Bulgaria and Romania (USDA, 2013).

South Africa is the second export country of the southern hemisphere and fifth in the world (market share 6,7%) (Table 4). The leading export destination is the Netherlands, contributing over half (63%) of fresh grape exports towards the EU in 2011, followed by the UK, Germany and Portugal.

China is the largest producer of table grapes globally (12% market share) and the highest consumer (3.8 million tons per annum) (Huang and Gale, 2006). In 2011 its grape production for table consumption was 6.5 million tons, increased by 3.5 times compared to output of 2000 (OIV, 2011). WTO membership in 2001 and the return of Hong Kong, which is the main hub for import-export, have contributed to increase the international trade. The US are the main supplier of fresh grapes while Chile is increasing its market share in winter. Exports of China are increasing very fast with main destinations Asian countries, particularly in South and Southeast Asia.

7.3.1.1 Discussion

An important first point is the dramatic loss of market share for European countries which were the important grape producers too, has been sharpened during the second and the third considered periods. It is important to notice that starting from the mid-80s, these countries, as members of the EU, have undergone a progressive process of reduction of protectionist measures for agricultural products and of opening to extra EU products. Moreover, the process of trade liberalization in the frame of the World Trade Organization (WTO) after 1994 has allowed the increasing competition by countries characterized by lower production costs and

by more efficient supply chains, leading to the decrease of the revenues of the European vine-growers and to a loss of competitiveness.

The same above reported motivations have fostered the growing role in grapes world market for another EU country: the Netherlands. In fact, this country, with an insignificant domestic production, currently ranks as the fourth exporter with 7.6% as market share and is, at the same time, the largest importer in the EU. During the last 30 years the Netherlands has gained high specialization in serving as trans-shipping country for many agricultural commodities taking advantage of the increasing process of trade liberalization. Several large trade companies import and re-export grapes through the hub of Rotterdam, supplying retail chains in order to offer year-round availability. During the spring summer period in the northern hemisphere, grapes are supplied from Mediterranean producing countries (Italy, Spain, Greece, Egypt, Turkey, Morocco) while during the off-season (October - May) most product is imported from South Africa (32%) and Chile (20%) followed by India (7.4%) and Brazil (5.4%); the main markets are European countries and the Russian Federation (CBI, 2011).

The 2009-2011 rank in Table 4 highlight that some extra European countries have taken advantage from the loss of competitiveness (with the exception of The Netherlands). It is evident the performance of Chile whose export market share has shifted from 1% at the beginning of the considered period to more than 21% currently, ranking first. It means that more than one fifth of table grapes exported in the world comes from Chile. The positive trend is evident in the first two periods, while in the third period (1995-2011), Chile has slightly lost competitiveness as new players have gained market shares.

The United States is also a big world player as producer and exporter (Tables 3 and 4). Table 4 shows that it is the only country with a fairly steady market share (12%) both at the beginning, when it ranked third, and at the end of the period when it ranks second.

Emerging exporters, with positive significant trends are China, Egypt, India, Mexico and Turkey in the Northern Hemisphere and Argentina, Brazil, Peru and South Africa in the Southern Hemisphere. South Africa could not be considered an "emerging exporter" as it ranked seventh between 1961-1963 (Table 4), shipping grapes overseas on the basis of its privileged trade relationship with European markets, particularly the Netherlands and the UK.

In the northern hemisphere, China shows an increase in competitiveness over the last two periods (Table 4).

The emerging exporters in the northern hemisphere are Mexico, India and Egypt (Table 4). By the late 1990s the Indian grape export has shifted from Gulf countries, as the United Arab Emirates (UAE) to EU countries, particularly the Netherlands, UK and Belgium.

The increasing process of trade liberalization has fostered the competitiveness of emerging countries which have made relevant improvements in quality of production, in the supply chain techniques and in shipping and transportation logistics. As a result, the market shares of European producers have been eroded by new competitors, and the US is the only historical producer which has managed to keep the same market share over time. In the Northern Hemisphere, new competitors are China, Egypt, India, Mexico and Turkey, which are emerging fast.

There has been a proliferation of sustainability standards in the export of Grapes. These figures may change depending on the ability and willingness of the country to comply with these standards. Here India has to gear up and take advantage of the situation to garner more market share. It has come a long way and has the potential to rise further and explore new markets. Complying with the sustainability standards will only help in the process.

7.3.1.1.1 Year 2016-17

World table grape production is forecast to jump, rising 1.0 million tons to 21.9 million as China's strong growth continues and Turkey's production recovers. Global trade is forecast up on China's higher shipments to Asian markets and as import growth doubles.

- Brazil is lowered 500,500 tons to 959,000 on unfavourable growing conditions.
- India is up 323,000 tons to 2.8 million on updated data.

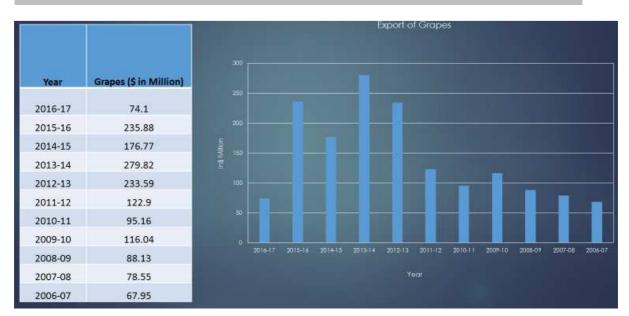
World imports are raised 183,500 tons to 2.7 million.

- China is up 31,900 tons to 249,000 on greater shipments from Chile and Australia.
- The EU is raised 23,000 tons to 608,000 on higher shipments from India.
- Hong Kong is up 42,000 tons to 232,000 on larger shipments from Chile.

World exports are boosted 129,000 tons to 2.8 million.

- Chile is raised 28,000 tons to 688,000 on updated data.
- Hong Kong is up 20,000 to 190,000 on higher shipments to China.
- India is raised 30,000 tons to 160,000 on greater shipments to the EU and Bangladesh.
- Peru is raised 45,000 tons to 340,000 on updated data.





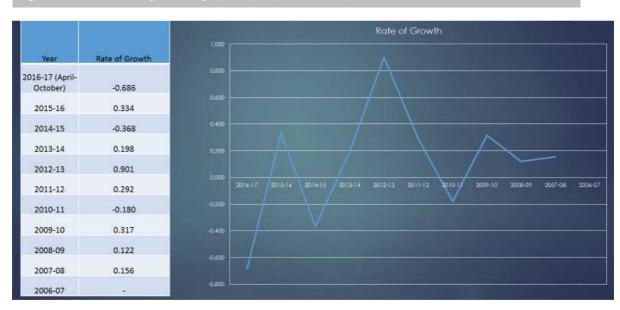


Figure 9. India's rate of growth of grapes export (2006 - 2017)

7.3.2 GlobalG.A.P. learnings

In fresh fruits and vegetables sub-sector, the applicable PSS GLOBALG.A.P has gained worldwide acceptance. During the implementation of GLOBALG.A.P. the producers felt that there have been certain technical issues that had to be interpreted to the Indian conditions lest their certification was in jeopardy. GLOBALG.A.P. has mechanism to internalise local practices by mechanism of formulating National Technical Working Group (NTWG). This assists in aligning the country-specific practices with the GLOBALG.A.P. Understanding the various issues and different approaches by various stakeholders viz., Accreditation Bodies, Certification Bodies, Consultants, farmer groups QCI signed an MoU with GLOBALG.A.P. in May 2008 and constituted a National Technical Working Group under the chairmanship of Dr. Mangla Rai, the then Secretary, Department of Agriculture Research and Education (DARE) involving all the stakeholders for harmonisation approach towards implementing and assessing of GLOBALG.A.P.

The NTWG set up a Task Force under Dr. Pitam Chandra, now Director, Central Institute of Agricultural Engineering which drafted the interpretation document. The National Interpretation developed by QCI has been accepted by GLOBALG.A.P. and placed on their website⁴⁰ as an official document which is obligatory w.e.f October, 2013. You may visit GLOBALG.A.P. website at link for the same.

The national interpretation helped to bring in clarity and adoption of local practices for important control points in the interpretation guidelines, significant growth has been experienced in implementation of GLOBALG.A.P. India being the second largest producer of Fruits and Vegetables in the world stands benefitted by the Guidelines being developed and adopted.

7.3.3 Metrics for measuring sustainability

7.3.3.1 Consumer expectations

Consumers nowadays are informed about issues related to food safety and quality. The reason for the heightened awareness is the role of NGOs in sensitizing the public about food-safety risks and their rights for demanding safe food. With information easily available, the consumer has high expectations from the

⁴⁰ GLOBALG.A.P., *India Interpretation Guideline, Integrated Farm Assurance, Control Points and Compliance Criteria*, Obligatory from October 2013.

produce purchased which is expected to be free from contaminants and safe to eat. Since, India's production base constitutes of large number of stakeholders there has been a separate set of requirements that needs to be ensured so that the retailers have already taken care of the requirements that would ensure quality.

Globally, food needs have gone beyond merely supplying food, to 'safe to eat'⁴¹. The buyers understanding the sentiments of the consumer place stringent requirements for safety, quality and traceability as a pre-requisite for procurement from the grower. The requirements include mandatory record keeping by the farmer implementing the requirement and ensures that prescriptive based sale of controlled chemicals at registered places in order to avoid spurious chemicals used by the producer. The requirement of traceability is more so in developing countries since procurement is done from small farm owners and aggregators in India and managing traceability becomes an issue.

The requirements now extends that the farm has a set of good and hygienic practices for all activities undertaken by the producers of the fresh produce. Specific requirements have come up where the farm needs to demonstrate that the farm worker/farmer has been trained and educated on personal hygiene. The requirements are not only restricted to the consumer welfare; it has now graduated to a place where the farm workers' health and hygiene in terms of safe application of pesticides and efficient spray technology used needs to be established to prevent contamination in fields.

7.3.3.2 Parameters for certification

In the recent years, India's footprints in the global market both in terms of the primary agricultural produce and the processed products is growing. This makes it an ideal destination for the buyers and retail chains to source a wide range of food and agri-produce. While the consumer expects that the domestic and the imported food meet the high standards of quality and safety, the retailers looks out for safeguards in order to meet the consumer requirement. In food, this translates to good hygiene practices, traceability, labelling, absence of allergens, maximum residual limits (MRL) of pesticide etc. It has been already mentioned in earlier sections that the retailers and buyers have found that prescribing of PSS that handles all or a part of it will assist the buyer to pass on the responsibility of compliance to the producer and having an oversight by the PSS and the certification body that assess it for compliance.

There have been a host of requirements that one finds in PSS that are prevalent in India. The notable PSS is the GLOBALG.A.P. that has evolved over the years from focussing on Europe has now made itself relevant in the entire globe. The standard which earlier focussed on the good agriculture practice has now standard for almost all the primary productions including livestock and aquaculture. They have also expanded the standard on risk assessment on Social Practice.

There are various other requirements that are needed to be fulfilled by an exporter based on the country/market of destination. The review of table grapes export in Grapes has revealed that there a host of PSS are required for entering existing markets and in some cases required to enter into new markets.

7.3.3.3 Prevalent PSS for addressing market requirements

In a review of the current prevalent standard in table grapes, it was seen that a grower exporter typically equips himself with the following PSS in order to remain competitive in the global market.

- GLOBALG.A.P.
- BRC Food
- Fair-Trade Certification of Fairtrade Labeling Organization

⁴¹ Prakash, J. "The Challenges for Global Harmonisation of Food Safety Norms and Regulations: Issues for India", Journal of the Science of Food Agriculture, (2013).

- Gender Equity Seal Standard of UN Women
- Water Stewardship Standard of Alliance for Water Stewardship
- Environmental Standard ISO 14001
- Occupational Health and Safety Standard ISO 18001
- Business Social Compliance Initiative (BSCI)
- Ethical Trading Initiative UK Code of Conduct
- Field to Fork Standard of Marks and Spencer UK
- Linking Environment And Farming (LEAF) UK Standard

It was revealed during discussions that the top of the line exporters have been proactively seeking the upcoming PSS in order to remain ahead of the pack for cornering markets. Some of the PSS which have now been pursued are:

- Social Accountability International SA8000 Standard
- Sustainable Agriculture Network Rainforest Alliance Standard
- Sustainably Grown Standard of SCS Global Services
- The Greenhouse Gas Protocol Initiative
- AccountAbility Geneva AA1000 sustainability standards
- Global Reporting Initiative GRI Standards
- Sustainability Initiative South Africa SIZA Standard

7.3.3.4 Cost involved

A typical certification for a single grapes farm costs between INR 11000 to 15000. The group certification costs anywhere between INR 100,000 to 1,50,000 which depends upon the number of the farmers and the number of crops that farmer aims to certify. The cost of compliance is somewhere from INR 25000 to 40000 depending upon the existing level of compliance.

While there is no premium on certified produce, the aim of the exporter is to find new markets and have a foothold in such markets.

7.3.4 Sustainable Grapes Initiative – India (SGI-I)

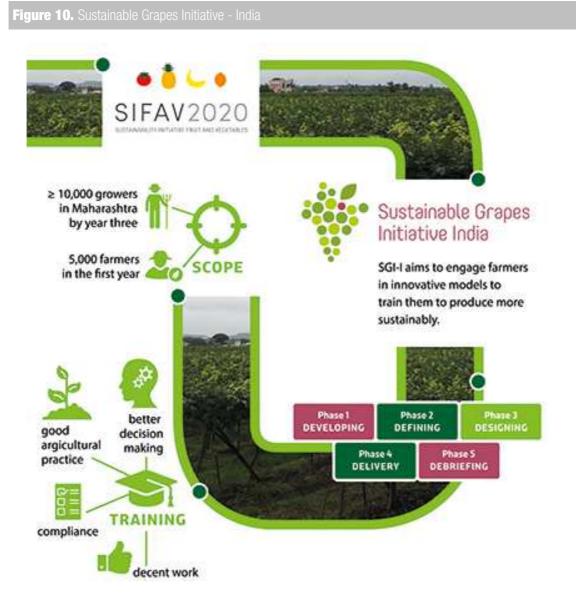
In 2014, Sustainability Initiative Fruit and Vegetables (SIFAV) partners including Dole, Univeg, Levarht, Jaguar, ICA Sweden, Superunie, Syngenta and Timerfruit decided to form a working group to discuss their interest in sourcing sustainable grapes from India. With a public commitment to sustainability, these organizations encouraged SIFAV to look into possible collaborations in India which could accelerate the supply of sustainable grapes. SGI-I is a direct outcome of this push in market demand. A first step to develop a program approach was taken in December 2015. SIFAV along with the Agricultural and Processed Food Products Export Development Authority (APEDA) and the Netherlands Embassy in India hosted the first stakeholder roundtable on pertinent issues and imminent challenges in the Indian grapes sector. Around 50 participants addressed issues such as moving beyond simple interventions and the complexities in trade. The

outcome of the meeting, together with research studies carried out by ICCO and CMS formed the basis of the intervention design. Subsequent meetings of SIFAV and SGI-I have helped to focus the program intervention in the first year to grower and labour capacity building. SGI-India was officially launched on the 25th of April, 2016 in Mumbai.

The programme aims to:

- create a common agenda for sustainability in grapes production with relevant stakeholders that cater to the wider needs of sector
- involve in a pre-competitive platform presenting an opportunity to encourage sector-wide learning and share best practices and experiences
- create an opportunity to pro-actively present a united front to the global community about the Indian Grapes sector and the advantages received when associating with the program
- foster partnership and collaborations across the value chain to address common issues in the grapes sector and deliver lasting impact

The outcome of the program will not only benefit the members importing grapes from India but also support the domestic market by decreasing risk and increasing quality through sustainability. At the same time, the project will also help improve the businesses and livelihoods of small farmers, workers and relatively larger growers in India.



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8. Product Group: Textile

8.1 Why textile as a priority product group

Historically, the textile and clothing (T&C) industry has remained an important facet of the Indian economy. It probably dates back to 3000 BC, when mordant dyes and printing blocks were used. India was blessed with a diversity of fibres, and hand looms were used for weaving cloth. Organic dyes were used that were eco-friendly. Indian textiles became famous throughout the world⁴² for finesse, quality, and design.⁴³

During pre-historic times, Indian textiles were exported to China, South-East Asia, and Portugal. Some of the exported items included embroidered bedspreads, wall hangings, and quilts of cotton or jute with wild silk embroidery.⁴⁴ In fact, the textile industry played a prominent role in the industrial development of India. The manually operated textile looms served as a model for developing the first textile machines in newly industrialised economies.⁴⁵

When Britain colonised India, the country became dependent upon T&C manufactured in the Western world. By 1880, India transformed from a leading textile-exporting country to a textile-importing one. But after Independence, textile capabilities were enhanced and the product base was diversified, helping the sector emerge once again as a global player in the international market of T&C products.⁴⁶

At present, the Indian T&C sector holds a significant position in the nation's economy. The sector provides direct employment to more than 35 million people and indirect employment to more than 50 million.⁴⁷ T&C contribution to industrial production, GDP, and export earnings stand at 14 percent, 4 percent, and 17 percent respectively. The sector accounts for 26 percent of manufacturing output and 18 percent of industrial employment.

Previously, the Western world used to be the major exporter of T&C products. But, over time, the production base has shifted from the developed economies to the developing ones for a number of reasons, including labour cost. Table 5⁴⁸ depicts a marked differential in labour cost for T&C industries across the world.

⁴² Chandra, P., *The Textile and Apparel Industry in India*, Indian Institute of Management (IIM,) Ahmedabad, India, 2006. Available at: http://www.iimb.ernet.in/~chandra/The%20Textile%20and%20Apparel%20Industry.pdf; accessed on 22 February 2017.

⁴³ Zala, VS, A Study of Productivity and Financial Efficiency of Textile Industry of India, 2011. Available at: http://shodhganga.inflibnet.ac.in/bitstream/10603/1944/9/09_chapter1.pdf; accessed on 22 February 2017.

⁴⁴ Ibid.

⁴⁵ Ibid.

⁴⁶ Chandra, P., *The Textile and Apparel Industry in India*, Indian Institute of Management (IIM,) Ahmedabad, India, 2006. Available at: http://www.iimb.ernet.in/~chandra/The%20Textile%20and%20Apparel%20Industry.pdf; accessed on 22 February 2017.

⁴⁷ Ministry of Textiles, Government of India, Annual Report 2011-12.

⁴⁸ Kavitha, N., *Textile Industry in Indian Scenario.*

Table 5. Labour Cost Comparison in T&C Sector

Labour	Europe Rs/Hour	India Rs/Hour
Skilled workers	750	20.00
Operating personnel	625	12.50
Unskilled workers	500	6.25
Operating hours per annum	6,750	48.75

Moreover, the Indian textile industry has comparative advantages over its competitors for the following reasons: 1. Rich tradition in textiles and historic operation experience 2. Large and increasing internal market 3. Strong raw material base 4. Production along the entire textile value chain 5. More stable and low-risk economy 6. Easy availability of raw materials like cotton, silk, jute, and wool 7. Suitable climatic conditions.

The textile industry has made a major contribution to the national economy in terms of direct and indirect employment generation and net foreign exchange earnings. The sector contributes about 14% to industrial production, 4% to the gross domestic product and 27% to overall foreign exchange inflows. It provides direct employment to over 45 million people. India's share in Global textiles increased by 17.5% in 2013 compared to 2012. The potential size of India's textile and apparel industry is expected to reach \$223 billion by 2021.⁴⁹

The abundant availability of raw material such as cotton, wool, silk and jute as well as skilled work force have resulted in making India a sourcing hub. The Indian textile industry accounts for about 24% of the world's spindle capacity and eight percent of global rotor capacity. The potential size of the Indian textiles and apparel industry is expected to reach US\$ 223 billion by 2021.⁵⁰

Owing to the present scope and future potential of the industry, textile has been chosen as a PPG for this study.

8.2 Textile supply chain

The textile and apparel supply chain (Figure 11)⁵¹ comprises diverse raw material sectors, ginning facilities, spinning and extrusion processes, processing sector, weaving and knitting factories and garment (and other stitched and non-stitched) manufacturing that supply an extensive distribution channel. This supply chain is perhaps one of the most diverse in terms of the raw materials used, technologies deployed and products produced.

⁴⁹ Textile Industry in India, India Brand Equity Foundation, February 2015.

⁵⁰ A brief report on textile industry in India, ASA & Associates LLP (2015).

⁵¹ Chandra, P., *The Textile and Apparel Industry in India*, Indian Institute of Management (IIM,) Ahmedabad, India, 2006. Available at: http://www.iimb.ernet.in/~chandra/The%20Textile%20and%20Apparel%20Industry.pdf; accessed on 22 February 2017.

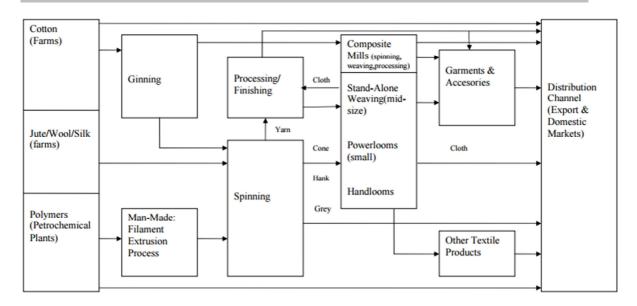


Figure 11. Textile and Clothing Supply Chain

The raw material in the supply chain in apparel and textile uses a host of material. This includes cotton that remains the most significant raw material for the Indian textile industry. The other fibres produced are silk, jute, wool and man-made fibres. Cotton grows mostly in western and central India, silk in southern India, jute in eastern and wool in northern India. Significant qualities of cotton, silk and wool fibres are also imported by the spinning and knitting sectors. The huge raw material base itself has seen to a host of PSS being employed for assuring quality not only for the raw material but also for the procurements (including pay outs) but also for the human resource employed in the making of apparel and textile.

8.3 Textiles and Clothing: India Trade Profile

The Indian Textile Industry is the second largest employer after agriculture, which provides direct employment to around 45 million people. The sector also accounts for 14% of India's total industrial production, which is close to 4% of the country's total GDP.⁵² According to the WITS Comtrade 2014 data, India ranks only second after China in the list of the world's largest exporters of Textile and Clothing, with an impressive export figure of around USD 38.6 billion. The Indian textiles industry, currently estimated at around US\$ 108 billion, is expected to reach US\$ 223 billion by 2021.

This was the first organized industry that came up in the country. Being one of the oldest industries and holding a significant share in country's total investment, employment and output, the textile and clothing industry occupies a central place in Indian economy. With an abundant availability of raw materials such as cotton, wool, silk and jute as well as of a relatively cheaper labour force, India enjoys a comparative advantage in terms of cost of production and of a skilled manpower relative to major textile producers.

The textile and clothing sector internationally, has been governed by several agreements which have sought to curb imports from developing countries to developed nations over the past few decades. The history of trade in Textile and Clothing can be dated back to the post World War II period, when there were several bilateral trade agreements taking place largely in response to the pressure posed on the industrial countries by Japan's export-led industrialization. Japan's highly competitive textile exports to these countries made them wary of the international competition as well as the shrinking domestic market. These agreements, however, came to a halt in 1961, when a regulatory framework was signed by the then GATT

⁵² Ministry of Textiles, Government of India, Annual Report 2014-15.

member countries, which was named as the Short-Term Agreement. In 1962, this was replaced by the Long-Term Arrangement Regarding International Trade in Cotton Textiles, imposing controls on the exports of cotton textiles from the Developing countries to the Developed ones. The long-term arrangement was soon superseded by the Multi-Fibre Agreement (MFA) in 1974. Though the MFA was initially thought of as a temporary safeguard, it was extended several times in 1978, 1982, 1986, 1991 and 1992. Finally, it was at the Uruguay Round in 1994, that the participating countries agreed to abolish the MFA over a ten-year transition period through the Agreement on Textile and Clothing (ATC) and eventually, on 1st January 2005, MFA was phased out completely.⁵³

The phasing out of the MFA has had a positive impact on India's share in world exports, which, according to the WITS Comtrade figures, grew from around 3.37% in 2005 to 4.53% in 2014, at a CAGR of around 3.01%. Comparing this growth with that in the previous decade, the share of India in world exports of Textiles and Clothing declined from 3.02% in 1994 to 2.94% in 2004 at a CAGR of (-)0.25% (WITS Comtrade).

Clearly, the removal of quota restrictions by the developed countries on the exports of textiles and clothing from the developing countries through the course of the MFA-phase out has provided the Indian textile exporters with greater opportunities for increased exports and for reaping benefits of the comparative advantage that India possesses in this sector.

According to the recent WITS Comtrade figures, the leading T&C exporters of the world in 2014 in order of ranking were: China (33.81%), India (4.53%), Italy (4.33%), Germany (4.16%), Turkey (3.41%), Bangladesh (3.17%), Vietnam (2.96%), United States (2.65%), France (1.94%) and Belgium (1.84%).

Interestingly, during the post-MFA regime, of these leading T&C exporters, leaving China, which stood out in terms of its export figures, as discussed earlier, only India, Vietnam and Bangladesh have experienced a positive CAGR in share of exports. All the other countries have witnessed a decline in share of global exports of T & C during the post MFA regime as shown in Figure 10.

⁵³ Article 1.1, Agreement on Textiles and Clothing, Uruguay Round Agreement.

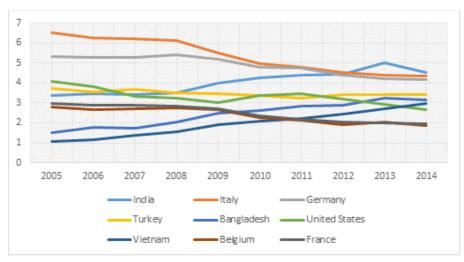
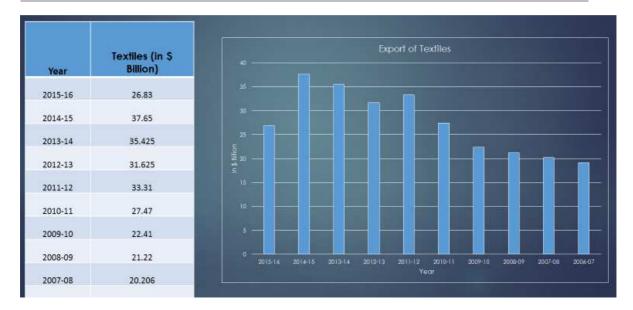


Figure 12. Share of global T&C exports post-MFA regime

Source: UN Comtrade Database

Figure 13. India's export of textiles (2006 – 2016)



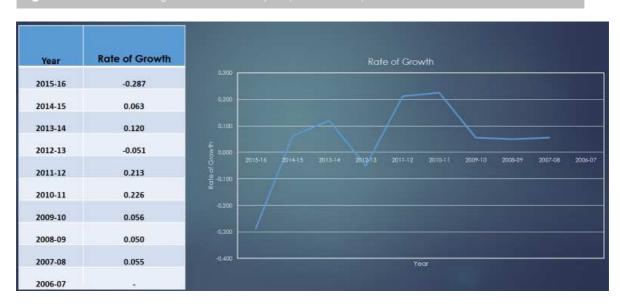


Figure 14. India's rate of growth of textiles export (2006 - 2016)

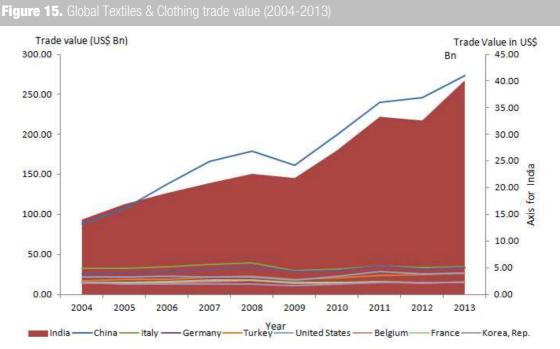
However, in recent years, countries like Bangladesh and Vietnam have been posing a threat to India's competitiveness. During the post-MFA regime, Vietnam and Bangladesh were the top two nations in terms of CAGR in share of exports for T&C (WITS Comtrade). Vietnam's share in world exports rose sharply from 1.05% in 2005 to 2.96% in 2014 at a CAGR of 10.94%, whereas Bangladesh's share increased from 1.52% in 2005 to 3.16% in 2014 at a CAGR of 7.61%. Therefore, Vietnam and Bangladesh could be seen as a potential threat to India's rising dominance in terms of share in T & C exports to the world.

Moreover, following the Trans-Pacific Partnership (TPP) Agreement, which is a trade agreement among twelve Pacific Rim countries and which was reached finally on 5 October 2015, after 7 years of negotiation, it is strongly believed that Vietnam could be a major gainer. TPP, which will slash an estimated 18,000 tariffs among the participating countries, is likely to boost foreign investment into (and thereby exports out of) a low-wage economy like Vietnam. Bangladesh, also being a low wage economy, its textile industry is primarily based on low-cost apparel manufacturing. Therefore, enjoys a greater competitiveness vis-à-vis the competing exporters and thus, may pose a threat to India's position in world exports of T&C, by inching closer every year.

Rank	Top exporters	Value of export-Bn USD (2013)	% Share (2013)	CAGR (2004-2013)
1	China	273.96	37.85	13.34%
2	India	40.19	5.55	12.29%
3	Italy	35.37	4.89	0.72%
4	Germany	33.65	4.65	3.02%
5	Bangladesh	27.83	3.84	24.06%
6	Turkey	27.39	3.78	5.03%
7	United States	26.77	3.70	2.23%
8	Belgium	16.34	2.26	1.76%
9	France	15.79	2.18	0.40%
10	Korea, Republic of	15.73	2.17	0.60%
Rest of World		210.87	29.13	-0.23%
World		723.89	100	5.15%

Table 6. Global Trade in Textiles and Clothing (2004-2013)

Source: UN Comtrade Database.



Source: UN Comtrade.



As is clearly seen, majority share in India's exports is held by Product Chapters 52, 61, 62 & 63 which constitute cotton yarn and fabrics, clothing products and home textiles respectively.

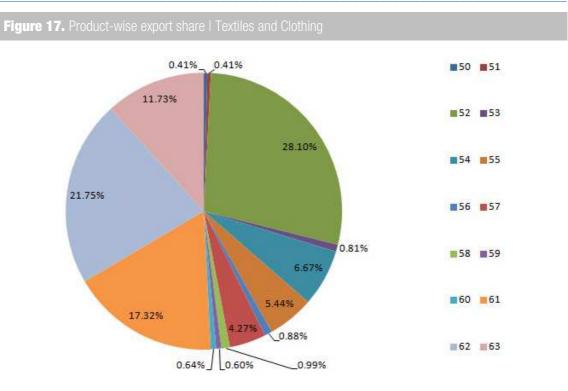


Table 7. HS-Code description of Textile Products

HS-Code	Description
50	Silk, Inc. Yarns & Woven Fabrics Thereof
51	Wool & Fine Or Coarse Animal Hair, Inc. Yarns & Woven Fabrics Thereof
52	Cotton, Inc. Yarns & Woven Fabrics Thereof
53	Veg. Textile Fibers Nesoi, Yarns & Woven Etc.
54	Man-Made Filaments, Inc. Yarns & Woven Etc.
55	Man-Made Staple Fibers, Inc. Yarns Etc.
56	Wadding, Felt & Nonwovens, Special Yarns, Twine, Cordage, Ropes & Cables & Articles
57	Carpets & Other Textile Floor Coverings
58	Special Woven Fabrics, Tufted Textiles, Lace
59	Impregnated, Coated, Covered, Or Laminated Textile Prod, Textile Prod For Industrial Use
60	Knitted Or Crocheted Fabrics
61	Articles Of Apparel & Clothing Accessories-Knitted Or Crocheted
62	Articles Of Apparel & Clothing Accessories-Not Knitted Or Crocheted
63	Made-Up Textile Articles Nesoi, Needlecraft Sets, Worn Clothing, Rags

Source: UN Comtrade database.

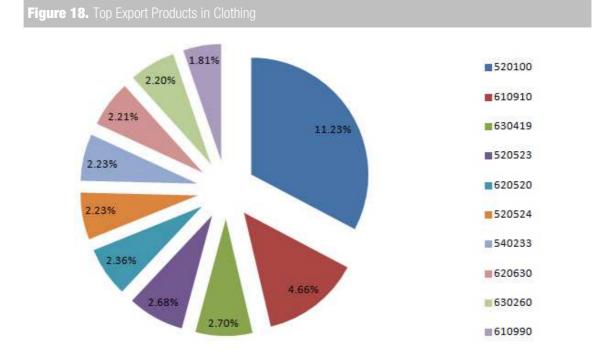


Table 8. HS-Code description of Clothing

HS-CODE	DESCRIPTION
611030	Sweaters, Pullovers, Sweatshirts, Waistcoats (Vests), Knitted or Crocheted, of Manmade Fibers
611020	Sweaters, Pullovers, Sweatshirts, Waistcoats (Vests), Knitted or Crocheted, of Cotton
620462	Women's or Girls' Trousers, Breeches, of Cotton
610432	Women's or Girls' Jackets of Cotton, Knitted or Crocheted
620342	Men's or Boys' Trousers, Overalls, Breeches, of Cotton
540752	Dyed Fabrics (85% or More By Weight of Textured Polyester Filaments)
610462	Women's or Girls' Trousers, Breeches, of Cotton, Knitted or Crocheted
620293	Women's or Girls' Anoraks, Wind-cheaters, Wind-jackets of Man-made Fibres
610990	T-shirts, Singlets, and Other Vests, of Other Textile Materials
620193	Men's or Boys' Anoraks, Wind-cheaters, Wind-jackets, of Man-made Fibres



Figure 19. India's trading partners in Textiles & Clothing

8.4 Issues in the textile sector

Textile and apparel sector in India is among the largest employers and foreign exchange generators. At the same time, it is also a cause of environmental pollution through discharge of untreated effluent, which mainly occurs at wet processing stage. Second major issue is socially unacceptable practices like child labour, excessive overtime, non-payment of legal minimum wages, etc. which mainly happens at ginning, spinning and garmenting stages.

The awareness of compliances is limited to the large scale organised units and very few MSME units. The intent to improve is generally missing and businesses don't voluntarily invest in better treatment plants or training of workers. Seasonal nature of some sections of industry is also a problem area.

Two of the most problematic issues in the industry are work hours, and wages, because both have clear linkages to a company's bottom line. Constant consumer demand creates a competitive environment, and when costs need to be contained, these are often the two areas to first get squeezed. Discrimination is also common, but as a criterion for ethical standards systems to measure, it is a difficult one for auditors to readily identify within the workplace. In addition, home-workers often lack protection, and migrants can be subject to unfair and hazardous conditions.

Another complicated issue is the Sumangali scheme, a form of forced labour whereby young unmarried women are recruited to work in textile factories. In this scheme the girls enter into a contract in which the employer retains a part of the girl's monthly wages for their dowry. The girls lose the dowry if they attempt to leave early and often live in sub-standard conditions, receive very low wages, and are exposed to various forms of abuse. Adherence to the SA8000 standard means that certified factories do not engage in this scheme, but the practice is still prevalent in non-certified factories in Southeast Asia.

Consumers are still largely unaware of the sustainability of products they buy, but if it becomes a matter of image to buy "green," companies will be more compelled to make changes in their supply chain.

8.5 Concerns around PSS

While standards may vary in terms of the sectors of focus and the targeted issues, they do share several similar elements:

- They address activities of organizations rather than individuals.
- They address social and environmental issues/impacts arising out of their activities.
- Their uptake and external legitimacy does not inherently depend on involvement or action by state or public sector.

However socially oriented standards aim to eliminate the most egregious practices such as forced labour, human rights violations, and child labour. They often require adherence to local laws or international best practices on these issues. There is evidence that certification schemes have reduced the likely occurrence of some of these practices, such as child labour, which have led to investments in educational facilities, infrastructure, increased access to water, sanitation & hygiene.

The textiles and Apparel sector is uniquely positioned as the second largest income generating sector in India, prominent export earner and employment generator. From fibre to fashion it is defined by several tiers, multitude of supply chains and intertwined with the social – cultural fabric of the country for now centuries.

The key issues related to PSS in the textile and apparel sector emerge from:

- Its ecosystem that it operates in locally informality, size and low skilled labour
- Global factors such as exporting to the most advanced nations and enlightened consumer
- Sphere of influence- WTO, USDoL
- Scope of operation mid value/ raw material/ final product supplier
- Transparency of the supply chain
- Seasonal nature of the industry
- Multiplicity of seasonal supplies and fashion changes.
- Dominance by fast fashion clothing
- Long and complex supply chain including contract, migrant and home based workers
- Prevalence of semi-literate and illiterate workforce
- Multiplicity of standards
- Audit Fatigue
- Small and unviable size of the units without substantial bandwidth to implement standards.

The apparel sector being the most visible end of the supply chain it is important that any interventions related to the textile and clothing sector should well encompass both textiles and apparel.

8.6 Barriers being faced by PSS in the textiles sector

- Limited consumer knowledge to regional and global eco-labels.
- When ranked, environment is one of the least important concerns for consumers when buying clothes and textiles.
- Limited availability of eco-labelled clothes is a minor barrier.
- More consumers argue that it is the governments job to implement environmental measures, not the consumers
- There is generally low trust among consumers that the textile and clothing industry takes environmental considerations
- No existing eco-labels is perceived as a good alternative for all the important stakeholders. Alternative initiatives taken by the retail companies themselves
- A window of opportunity for eco-labels is baby products.

8.7 Action points at policy level for enhancing sustainability in the T&C sector

- Encourage initiatives, project innovation etc. and provide incentives for the development and take-up of environmentally friendlier textiles;
- Lead by example by purchasing environmentally friendlier textiles following sustainable production practices;
- Encourage the implementation of ILO norms;
- Support, implement and/or fund consumer awareness and behaviour change campaigns;
- Examine the use of economic instruments for promoting sustainable consumption of textiles/clothing;
- Develop measures for better tackling "greenwashing" i.e. false sustainability claims;
- Revisit the approach and effectiveness of policy related to chemical use in the fashion and textile industry, including chemicals used in the fibre or garment production processes;
- In addition, new technologies, such as nanotechnology and GMOs, should be thoroughly investigated to determine whether and to what extent they pose a risk to human health and the environment.

8.8 Textiles & SDGs

Box 4: What objectives of SDGs in the textile sector can PSS help impact?

Based on inputs received from the stakeholder experts in the textile sector, standards are required in the textile sector to iron out the following issues, and in turn fulfil the 5 Ps of the preamble of the SDGs:

People – to end poverty to ensure that all human beings can fulfil their potential in dignity and equality and in a healthy environment:

Textile sector is a manpower dominated industry, large segments of women workforce, bringing in the gender equality and discrimination issues to the forefront.

Planet- to protect the planet from degradation, promote sustainable consumption/production, taking urgent action on climate change;

This sector is considered the largest rival of the chemical industry in terms of environmental impact – bringing to the forefront – issues pertaining to safe chemicals, water use and reuse, noise and air pollution.

Prosperity – to ensure that all human beings can enjoy prosperous and fulfilling lives.

With its huge share of migrant, seasonal, contract workers, this sector has a huge challenge in terms of training and educating its workforce in terms of its rights, wages etc.

Peace – to foster peaceful, just and inclusive societies which are free from fear and violence.

Like any other manufacturing sector, to be able to graduate away from trade unions to associations and empowered societies.

Partnership – to mobilize a revitalized Global Partnership for Sustainable Development, focused on the needs of the poorest and most vulnerable and with the participation of all countries, all stakeholders and all people.

Textiles continue to contribute extensively to the GDP of India and form a large portion of he country's total exports.

8.9 Good Practices in the Textile PSS Sector

8.9.1 GOTS

Box 5: Impact of GOTS in India

Advent of the Global Organic Textile Standard (GOTS) in India

Though organic cotton has taken the lead since the inception of EU standard EEC 2092/91, the organic textile was started much later with private initiatives like EKO, OE and GOTS. GOTS had taken its first step of success in 2005 with an international working group preparing the whole standard, its implementation starting in the following year. GOTS claims to be the most accepted standard in the world for textiles not only by Governments, but also by all the leading brands that have accepted it as a GOLD standard due to its strong technical and social background, high consumer acceptance, label priority, and transparency.

India is a front runner in supplying the raw materials as input and has ranked first as a global sourcing destination, since last decade. India's export potential as organic cotton, yarn and garments which are GOTS certified has tremendously increased with time directly benefiting the GDP and also the grass root framers. Today on an average the premium in GOTS certified products compared to normal products is placed at 5-30 per cent on an average depending on the value addition and place of export with buyer's recognition. All the top 20 buyers in the world have recognized GOTS as potential standard and has emphasized on improving the business keeping GOTS label at high priority. This has provided batter life and service opportunity to more than 200,000 farmers, 300 spinning mills, 200 fabric mills, 500 garment factories involving several workers.

The certification bodies recognized by GOTS confirm to ISO 65 recognition and also fulfills all the criteria of GOTS requirements. The certification bodies charge between INR 10,000 and INR 20,000 per man-day; man-days are decided keeping the unit size and activities in mind. Further, some certification bodies charge man-days of travel which cost between INR 5,000 INR to INR 10,000 per man-day. The certification and registration cost paid to the standard is based on standard rate of 120+30 Euros per unit of certification. Some certification bodies charge for the report provided, which stands at around 5,000 - 10,000 INR.

8.9.2 Sustainable Apparel Coalition

The Sustainable Apparel Coalition (SAC) claims to be the apparel, footwear and home textile industry's foremost alliance for sustainable production. The Coalition's main focus is on building the Higg Index, a standardized supply chain measurement tool for all industry participants to understand the environmental and social and labor impacts of making and selling their products and services.

8.9.2.1 Higg Index

The Higg Index comprises several easy-to-access, online tools or "modules" designed for members from every segment of the industry. By entering data about their business' impact areas, SAC members generate standardized performance scores that can be shared with current and future supply chain partners around the world at the click of a button. Scores are anonymized and aggregated, which allows businesses to benchmark their results against the industry and serves as a powerful incentive to strive for greater improvements and raise the sustainability bar.

All SAC members commit to using the Higg Index and to collectively revising and improving it. This ensures that the Index evolves into the most comprehensive, relevant and robust sustainability assessment tool possible—one that propels its users far beyond compliance measures and towards the upper reaches of innovation and impact.

8.9.2.2 Assessment

Each Higg Index module is comprised of questions developed by the SAC's members, stakeholders, and experts, which are regularly reevaluated and updated to address all corporate policies and practices, from foundation-level measures (such as basic compliance) to medium-level to aspirational-level (such as advanced and far-reaching sustainability policies). Higg users accrue points for every policy or practice that they follow, and receive the highest number of points for positively answering the highest-level questions. These aspirational questions are based on the best practices currently followed by SAC members, and they act as guideposts that point all Higg users towards the most progressive sustainability innovations with the greatest impacts.

8.9.2.3 Collaboration

By measuring sustainability performance, the industry can address inefficiencies, resolve damaging practices, and achieve the environmental and social transparency that consumers are starting to demand. By joining forces in a Coalition, we can address the urgent, systemic challenges that are impossible to change alone.

SAC further claims that,

The urgency and expanse of the sustainability issues facing the apparel, footwear and home textiles industries requires collective attention on a global scale. This is why collaboration is the heartbeat of the SAC. No company alone can shift the existing industry paradigms. To ignite the change required to redefine the way the industry is run, peers and competitors come together as a united front, adhering to the Coalition's set of core collaboration values that are designed to further impactful change across the industry. Through SAC membership, brands, retailers and manufacturers commit to transparency and the sharing of best practices, a full-circle collaboration that benefits all involved.

While collaboration is often equated with bottlenecks and roadblocks—the opposite of targeted and effective forward momentum—the SAC has cultivated an ethos of "perfect is the enemy of good enough." This philosophy ensures that the sharing of numerous perspectives doesn't interfere with progress. Though the ideal solution may yet to be found, adequate alignment around next steps is good enough to keep going. This dedication to moving ahead allows the Coalition to develop and share practical tools that support the industry's sustainability goals in a timely manner.

8.9.2.4 Core values for collaboration

In the SAC, collaboration is built on four core values:

8.9.2.4.1 Collective Measurement as a Catalyst for Change

The impacts of successful collaboration can be seen most readily in the Higg Index. The online suite of tools—developed by, and continually refined by, SAC members—set an industry-wide sustainability measurement, giving organizations the opportunity to reduce cost by allowing them to compare and benchmark the sustainability of their supply chains against others in the industry. The Higg's standardization also energizes change across the industry by giving individual companies a bird's eye perspective on the sustainability issues facing the industry as a whole.

8.9.2.4.2 An Equal Voice for all Supply Chain Partners

From its inception, the Coalition understood that true and effective collaboration requires hearing the perspective of every segment of the supply chain. By giving everyone an equal seat at the table, including manufacturers, brands, retailers, as well as NGO's, nonprofits, government entities, academics, and third-party providers like chemical companies, packaging companies and logistics providers, no one member of the value chain would dominate the push toward a more sustainable industry. This equal partnership is a

distinguishing feature of the Coalition, guaranteeing that all opinions are respected and considered and that the collective goal remains the focus of all.

8.9.2.4.3 A Membership Built on Trust

Collaboration is meaningless without trust. Equal partnership gives all Coalition members the opportunity to share their viewpoints in a safe space with the understanding that their thoughts will be received with as much respect as any other member. Equal partnership also allows members to express their opinions without fear of backlash from potential supply chain partners. This level playing field and uniquely open environment has established a pervasive level of trust throughout the SAC, paving the way for more effective pursuing of the common goal of an increasingly sustainable industry.

8.9.2.4.4 Encouraging Leaders

By joining working groups where they can share their expertise with the industry as a whole as well as one-on-one with their peers, members become leaders in their fields and influential voices in the development of SAC tools and services. Working groups and annual meetings are run by trained facilitators who understand the value of taking in all opinions without sacrificing progress.

8.10 Way forward

As India explores ways to boost living standards and reduce poverty, it is increasingly focusing on policy options to create jobs that are "good for development." For South Asia, this is a high priority, given that it must absorb nearly 1 million individuals who will enter the workforce every month for the next three decades, and that it continues to have a stubbornly low rate (30 percent) of female labour force participation.

Several types of private standard can be distinguished and can be roughly divided into buyer codes of conduct, certificates, and product labels. Compliance with a buyer code of conduct is often required by brands and retailers, such as H&M, IKEA or Walmart. Suppliers and other exporting companies are requested to adhere to the requirements outlined in those codes of conduct. As a result, compliance is often a prerequisite for initiating and/or continuing a business relationship with such a global company.

Export-oriented apparel production – for long a key industry in South Asia, plays a significant role in creating good jobs for development. Apparel work is highly female intensive, with women's share of total apparel employment being much higher than women's share of the national labour force.

Global value chains, like apparel is a classic example of a buyer-driven chain. It is characterized by decentralized, globally dispersed production networks and coordinated by lead firms that control the highest-value activities related to retailing, marketing, branding, and design. The buyers outsource most of the manufacturing process to a global network of suppliers – typically to low-income countries.

The main segments of the supply chain include apparel manufacturing, textile components (yarn and fabric) and trimmings and fibre [natural and manmade] with an inherent capacity, skills and a long history of exports of apparel trade. It also has the capability to produce final products that are growing in terms of global market share such as fashion products and fibre type. It is primarily an exporter of cotton products some MMF, wool and silk; comprising knit and woven tops, skirts, men's bottoms and embellished and embroidered apparel.

As the competition in the global apparel sector intensifies (buyers' consolidation process), successful manufacturers will need not only to offer competitive prices but also to introduce new processes, work organization, and technology – all of which improve operational performance and productivity, upgradation, integration and sustainability – both social and environmental. Apparel firms in India are disproportionately concentrated in the informal sector and tend to be small. Further, the nature of export basket makes the supply chain complicated and comprises of several tiers. India currently has midrange unit values but low productivity. Even though it has a more diversified export structure than the other SAR countries and a well-

developed fibre / manufacturing base. It ranks second in terms of value (\$12.5 billion) and global market share of approximately 5%.

As for policy options to improve global access one could help firms enter the formal sector and take advantage of economies of scale with less complex labour policies and scaled up compliances and codes of conduct and zero effect and zero defect; which is imperative to integrate into global and regional supply chains.

9. Product Group: Forestry (wood & handicrafts)

9.1 Why forestry as a priority product group

Forest worldwide have been used mainly for two reasons – the utilitarian perspective or from an ecosystem perspective.⁵⁴ The utilitarian perspective of use of forest is to directly satisfy human requirement whereas the ecosystem perspective focuses towards an ecosystem approach for addressing structure and function of forest. In India, forests are managed keeping the ecosystem perspective central.⁵⁵

As per the India State of Forest Report 2015, the forest cover of the country is 701,673 sq. km. (70.17 m ha) which is 21.34 per cent of the geographical area of the country. The tree cover is estimated to 92, 572 sq. km. (9.26 million ha) which is 2.82 percent of the geographical area. The total forest and tree cover of the country as per 2015 assessment is 24.16 per cent of the geographical area.

About 85% of the forest area is publicly owned and is administered by the Government. The public lands can be classified as protected, production or village forests. The timber industry of India produced in 2014 almost 50 million m3 of logs, of which only a minor portion was exported. The export value of primary timber products exceeded 80 million US dollars.⁵⁶ India has a thriving range of industries for semi-processed and value-added timber products, including wooden handicrafts, pulp and paper, plywood and veneer and wooden furniture. Exports of wooden handicrafts in particular are on the rise. It has been seen in the recent years that there has been a huge demand of certified wood to be used for these handicrafts for entering into the export markets. Therefore, the focus of this part of the study is to understand the impact of PSS in the sub-group 'wooden handicrafts' under the larger product category timber or forestry.

9.2 Indian forestry: Trade profile

While India is one of the world's top producers of tropical logs, it is one of the largest consumers of wood products. India cannot meet its own demand for wood products with the domestic supply and as a result it is currently the world's second largest importer of tropical logs.

India's export policy bans export of wood and wood products in the form of logs, timber, stumps, roots, bark, chips, powder, flakes, dust, and charcoal other than *saion* timber made exclusively out of imported logs/timber. One cannot also export wood sawn or chipped lengthwise, sliced or peeled, whether or not planed, sanded or end jointed, or a thickness exceeding 6 mm other than sawn timber made exclusively out of imported logs/timber.

⁵⁴ T.E. Kolb, M.R. Wagner and W.W. Convington, *Concept of Forest Heath*, Journal of Forestry (1994).

⁵⁵ India State of Forest Report, Forest Survey of India (1994).

⁵⁶ International Tropical Timber Organization Report (2015).

The only commodities that are allowed to be exported are handicrafts item that are made of wood where the timber is not in the negative list of exports or is banned from trading as per any international convention (CITES etc.). Following are India's export stats w.r.t. wood and handicrafts:

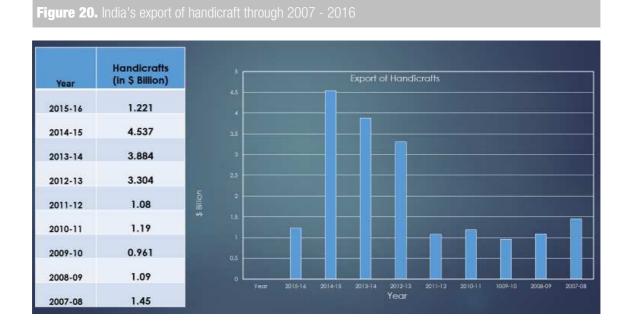
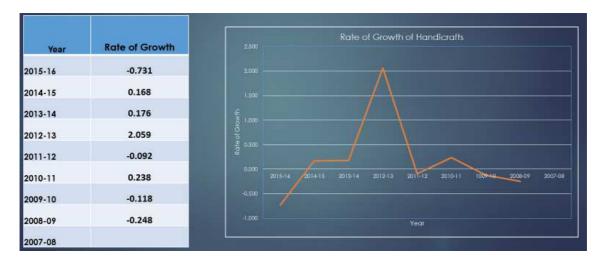


Figure 21. India's rate of growth of handicraft exports



9.3 Forest certification

For certifying the wood used in handicrafts, one needs to understand the concept of forest certification. Forest certification is a market based non-regulatory, voluntary conservation tool designed to recognize and promote sustainable forest management. Through Certification, important aspects starting from planting stock, Silivicultural operations, harvest planning and practices of timber and other forest produce are evaluated by an independent third party in accordance with the standards that address sustainable forest management, environmental protection as well as social and economic welfare.

Currently, there are plethora of forest certification Scheme globally, however, the most sought are the FSC and the PEFC. While the country has one of the best regulatory structure, India still needs to have a certification framework which caters to the India forest. There is growing realization among different forests/plantations based stakeholders of the country that India needs to develop Forest Certification standards and systems, which meet the international benchmarks and be eventually endorsed by a well-recognized international Forest Certification body. Elaborate forest certification standards and systems have been established by the countries like Malaysia, Indonesia, China, Australia, Brazil and Canada etc. and about 8% of the world's forests are now certified.

Forest certification helps in exposure of the management system to best international practices which lead to reduction in the rotation age with time.

Woodcraft of India is famous since centuries and is one of the ancient art practiced in different type of wood across various states including Kerala, Jammu & Kashmir, Uttar Pradesh and Assam. The most common varieties of wood used for craft are teak, sal, oak, ebony, mango, sheesham, etc. Saharanpur in Uttar Pradesh is famous for its wood works and also referred as "wood city of India".

It is a well-known fact that any system that is subject to audit has its processes and documentation updated with respect to the requirements of the relevant Scheme. While India is a net importer of timber, there is a huge demand for handicrafts item overseas. The total exports from India to other countries of the tune of INR 3900 Crores⁵⁷ for the year 2015-16. The country wise share to India's export is presented in figure that establishes the fact that India is being in the forefront of the wooden handicrafts export and thereby generating maximum revenue per cubic foot of wood as compared to any other forest based material.

S. NO.	COUNTRY	2014-15 (in Crores INR)	2015-16 (in Crores INR)
1	AUSTRALIA	101.96	127.82
2	CANADA	86.78	120.04
3	FRANCE	222.86	214.54
4	GERMANY	362.16	386.86
5	ITALY	29.17	27.92
6	JAPAN	11.24	10.12
7	NETHERLAND	134.23	187.43
8	UAE	78.69	236.18
9	SWITZERLAND	7.15	7.56
10	U.S.A.	1 372.44	1 592.03
11	U.K.	275.71	305.93
12	LAC	28.93	38.02
13	OTHER COUNTRIES	648.07	654.06
TOTAL		3 359.39	3 908.51

Table 9. India's exports of handicraft through 2014 – 2016 across countries

Source: EPCH, India

⁵⁷ Export Promotion Council of Handicrafts, India 2015-16, available at http://www.epch.in/moreDetails.htm, retrieved: 20 January 2017.

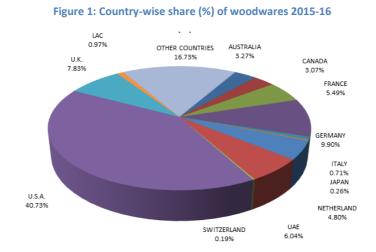


Figure 22. Country-wise share (%) of woodwares 2015-16

The wood used in handicraft especially so from the tropical countries is eyed with suspicion by many consumers world-wide. While the tropical timber is quite popular in handicrafts, furniture and home improvement – it carries an overwhelming impression of it coming from illegal logging and by destruction of natural ecosystems. Illegal logging over a period of time has been a concern as it causes environmental damage, loss of government revenue and promotes negative social issues such as corruption, conflicts and unrest due to lack of transparency amongst people

Since the country has no voluntary national forest certification Scheme there has been a demand for demand for FSC and/or PEFC certifications for the wood that is used in wooden handicrafts. Forest certification schemes such as these assists in operationalizing a system that has continuous monitoring and reporting mechanism in order to ensure that the tenets of sustainable forest management is followed by the forest managers at all time.

It is also established that forest certification helps in increasing the efficiency in forestry based operations, gives emphasis on value addition to forest based products, improved marketing strategies, concentrated efforts for better markets, better product positioning and visibility.

The outcome of a forest audit result in certification that validates the claims made by the forest manager by a third party. This in turn assures the overseas buyer and his customer that the wooden article that he buys is coming from a sustainably managed forest.

Currently the wooden handicrafts clusters are seen in Saharanpur, Nagina, Hoshiarpor, Srinagar, Amritsar, Jaipur, Jodhpur, Jagdalpur, Bangalore, Mysore, Chennapatna, Madras, Kerala & Behrampur (WB).

9.4 Market share of certified products v. non-certified products

The forestry sector is an example that gives us a good case study where the due to active roles that industry associations, environmental nongovernmental organizations (NGOs), national governments, and international organizations has led to the developing and promoting codes of conduct that are formally sanctioned and certified⁵⁸. It has been well known that certification helps in providing information about the management of the forest in terms of following the tenets of sustainability transparently to the stakeholders, especially the consumers. The phenomenon of certification is widely recognised as the tool for gaining either

⁵⁸ Carolyn Fischer, Francisco Aguilar, Puja Jawahar, and Roger Sedjo, *Forest Certification: Toward Common Standard,* (2005).

market access or having competitive edge over other business by showcasing responsible forest management.

While the concept of forest certification was to usher an era of conservation in the developing countries it has been observed that still the no. of certificates and the area under certification is overwhelming in the developed countries. The forest certification Schemes are largely third party certification Schemes that are developed through a stakeholder consultation at times skewed towards developed countries perspective about forest management.

While the certification aims to conserve forest and its biodiversity, it has been observed that in India the market has gone too far and focused on farm species such as mango wood getting certified. Major Corporates have made changes in their procurement policies and mandated purchase and use of certified material. It has also been seen that some leading sustainability Schemes have given cognizance to forestry certification Scheme under their scoring system to assess sustainability in forest based products.

The scope of such schemes not only addresses the forest and forest based produce, they have been now certifying wood ware/ wooden handicrafts emanating out of India.

9.5 Market access conditions

The Indian wooden handicraft has been strongly associated with the global value chain. It has been seen that over the years the Indian players have been successful in being part of the global markets not only thorough their artistry and innovation but also commanding a lucrative pricing and their ability to upgrade. However, the growing capabilities of independent producers result not only from the promotional efforts of independent buyers, but also from the increasing tendency of multinational retail companies (MNCs) to outsource manufacturing activities. The number of market segments, and within these, different market niches make this a complex issue. Moreover, for Indian exporter markets vary from region to region. For example, softwoods are strong in Europe, but in Japan particleboard and hardwood products dominate the market. While retailing in France, Germany and the United Kingdom consists of a concentration of large, multi-store outlets, in Italy most commodities are sold in small independent outlets.

While the exporters have long learnt the art of competitiveness – the constant requirements to impress upon the buyers that their wood has come from sustainable source has been the biggest challenge. The absence of a national voluntary Scheme has further compounded the problem. The markets in Europe and Americas have heavily dependent upon global Schemes to assure that the wood coming to the retailers shelve are coming from responsibly managed forest.

9.5.1 Interlinkage amongst existing PSS & regulations

In India, the forest are managed with the sole objective of protecting the environmental and its process rather than production as has been already mentioned. While we have a host of regulations the most significant one has been well documented that since 1991, India has focussed on sustainable development as our national objectives and in pursuance of our international commitments. The Forest (Conservation) Act, 1980, Rules and Guidelines focussed on regulating the indiscriminate diversion for non-forestry uses. The Forest (Conservation) Act, 1980 is till now considered a unique piece of legislation that put into action the resolve of the country to protect its biodiversity and only allow diversion for unavoidable use of forest land for various developmental purposes.

Recently we have seen that many countries also strengthened their regulatory systems in order to ensure that wood from unacceptable sources is eliminated from the supply chains. The regulations that changed the way compliance is met came first from the United States and then from European Union. The Lacey Act is a 1900 United States law that bans trafficking in illegal wildlife. In 2008, the Act was amended to include plants and plant products such as timber and paper. This landmark legislation is the world's first ban on trade in illegally sourced wood products.

The European Commission has come up with FLEGT. FLEGT stands for Forest Law Enforcement, Governance and Trade. The EU's FLEGT Action Plan was established in 2003. It aims to reduce illegal logging by strengthening sustainable and legal forest management, improving governance and promoting trade in legally produced timber. Implementation of the EU FLEGT Action Plan is with a focus on Voluntary Partnership Agreements (VPAs). The EU FLEGT Action Plan sets out a programme of actions that forms the EU's response to the problem of illegal logging and the trade in associated timber products. The EU Timber Regulation aims to reduce illegal logging by ensuring that no illegal timber or timber products can be sold in the EU. It was created as part of the EU's FLEGT Action Plan.

The EU Timber Regulation came into force on 3 March 2013. It prohibits operators in Europe from placing illegally harvested timber and products derived from illegal timber on the EU market. 'Legal' timber is defined as timber produced in compliance with the laws of the country where it is harvested.

Concurrently, the two-major private global forestry Schemes, the Forest Stewardship Council (FSC) and the Programme for Endorsement of Forest Certification Scheme (PEFC) started to work towards bringing value in their Scheme by ensuring that wood coming from unacceptable sources is eliminated. Various attempts were made by both the Scheme owners for increasing the efficiency and ability of each of their system to identify and eliminate any such possibility. It is noteworthy to mention that while one system FSC focusses on developing a centrally controlled Scheme whereas the other the PEFC develops Scheme that lends national Scheme more autonomy by endorsing it.

In India, it has been seen that the above-mentioned PSS have been proactively approaching the Indian market to present with solution to the exporters both for the US and EU markets.

9.5.2 Barriers

It has been a common experience that countries where there is a heightened consumer awareness coupled with advanced political, economic and social institutions, industry is are more likely to seek certification voluntarily. Mature institutions are needed to support a firms' certification claims, while ensuring buyers of certified products that they have recourse (through the legal system) should such claims prove false. Institutions reflect a collective commitment to public goods, while protecting the rights of the private provider.

In India, however, it has been seen that the barriers for sustainable forest certification in India is a function of variety of factors. This ranges from the existing market demand versus supply, the high value of the commodity, at times discretionary powers to forest managers, poverty and unemployment and the enforcement of the legal framework.

9.5.3 Opportunities, facilitators/enhancers

Exports of Handicrafts have shown an increase of USD 653.06 million (i.e. INR 4242.42 Crores from US \$ 3884.91 million (INR 23504.42 Crores) to US \$ 4537.98 million (INR 27746.84 Crores), an increase of 16.81% (18.05% in INR) over the similar period in 2013-2014.⁵⁹

The view of wooden handicrafts contrasts with other trade activity since in the earlier times an activity which was considered to be a non-traded, non-leisure activities carried out by artisans in villages within the agricultural sector. Over a period of time these activities were discarded due to lack of support of infrastructure and onslaught of requirements posed by the foreign buyers. However, over a period of time not only there has been new avenues opened, but also there was a marked change in the approach, support lend by the government that has able to make it a formidable sector. With the advent of standards in sustainability and social requirement – most of such enterprises show tremendous will power to match to the requirements of the major markets and excelling them.

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⁵⁹ EPCH India, 2015.

9.5.4 Implementation

In India the PSS in forest certification sector especially the wooden handicraft is dominated by FSC. The FSC has its National Forest Stewardship Standard (FSS) - a document that specifies the requirements with a forest management enterprise must comply in order to obtain FSC certification.

In order to have a more practical approach to forest certification the FSC has a mechanism to adapt international responsible forestry to national conditions. An FSC National Forest Stewardship Standard mixes the benefits of having a standard adapted to local practices with recognition of the international FSC system by foreign buyers⁶⁰.

The certification bodies authorised to certify as per FSC requirements have adapted the FSC requirements to the national practices.

9.5.5 Certification

For the purpose of the study, there are two types of certification awarded by the certification body. One is the Forest Management Unit certification (FMU) and the other is the Chain of Custody (CoC) certification. While the FMU focuses on the production and processing operations; the CoC addresses the movement of the certified wood in the value chain.

The process of FMU certification is to assess compliance to the Standard by reviewing of the documents and field visit to ascertain that the various principles and criteria have been met by the forest manager to award certification. The process of CoC certification is majorly audit of paper trail to ensure that the wood and its product that are FSC certified are the ones that are used in the processing of wood into the final commodity. Both the FMU and CoC can be single site or multi-site.

9.5.6 Increased selling price

The willingness to pay a price premium for certified forest products is a function of many factors that increases the price of the certified commodity. The important factors that contribute to the premium is the issues related to the certified product or commodity, level of environmental awareness among consumers, the quality and availability of information about the certification label on the product, and the credibility of the certification Scheme etc. Although there is evidence of consumer willingness to pay more for products from environmentally sound sources, the increasing trend has been that certification is more being used to access markets that to get premium on their certified status.

It has been however felt that the handicraft manufacturers, are not willing to pay a price premium for certified raw material or for costs associated with chain-of-custody procedures unless these additional costs can be passed on to consumers. Studies have shown that markets for certified forest products in developed countries are relatively limited, and the prospects for reaping a price premium can be poor.⁶¹ In case of developing countries especially so in India, with even less indigenous demand and a larger focus on raw materials, markets being price sensitive such prospects are even poorer in developing countries.

⁶⁰ National Forest Stewardship Standard, Forest Stewardship Council.

⁶¹ Ozanne, L.K., and R.P. Vlosky, *Willingness To Pay for Environmentally Certified Wood Products: A Consumer Perspective*, Forest Products Journal 47(6), (1997), pp 39–48; Anderson, R.C., and E.N. Hansen, *The Impact of Environmental Certification on Preferences for Wood Furniture: A Conjoint Analysis Approach*, Forest Products Journal 54(3), (2004), pp 42–50.

10. Role of Accreditation & Certification Bodies in Value Chains of PPGs

Setting up a Quality Infrastructure System is one of the most positive and practical steps that a developing nation can take on the path forward to developing a thriving economy as a basis for prosperity, health and well-being. A Quality Infrastructure is a system contributing to governmental policy objectives in areas including industrial development, trade competitiveness in global markets, efficient use of natural and human resources, food safety, health, the environment and climate change. It offers a complete package addressing the needs of the nation's citizens, of customers and consumers, and of enterprises and other organizations that offer them products and services. The Quality Infrastructure System covers essential aspects such as policy, institutions, service providers, and the value-adding use of international standards and conformity assessment procedures.

Governments, and the citizens they protect, are increasingly moving towards zero risk tolerance. Regulators are introducing stricter and more comprehensive regulations and reporting requirements. Businesses are therefore required to demonstrate legal and regulatory compliance. Almost all countries have rules and regulations related to safety for almost all goods. There are greater requirements regarding environmental performance, from recycling to packaging to energy consumption. Compliance with regulations is therefore no longer just meeting specifications, but it can relate to the lifecycle of a product.

The acceptance of accreditation by regional bodies, and domestic regulators within individual governments, also helps member governments of the World Trade Organisation (WTO) to meet their responsibilities of the Technical Barriers to Trade Agreement (TBT Agreement). The TBT agreement itself identifies accreditation as a means for central governments to recognise and have confidence in conformity assessment bodies in the exporting member economy.⁶²

In India, especially in the last decade, the Government and Regulators are increasingly seeking accreditation as a means of checking compliance to regulations through third party conformity assessment bodies. The Petroleum & Natural Gas Regulatory Board (PNGRB) was the first regulator to rely on accredited inspection bodies and uses NABCB accredited inspection bodies to check compliance with its regulatory framework; the Food Safety & Standards Authority of India (FSSAI), the food regulator, has notified NABCB accredited bodies to verify compliance to its regulatory requirements of GMP/GHP. Accreditation represents an excellent option to regulators to rely on 3rd party verification of compliance to their regulations and supplements their efforts.

Many voluntary schemes also utilize/prescribe NABCB accredited certification/inspection bodies. The Department of AYUSH, Ministry of Health & Family Welfare, has jointly with Quality Council of India (QCI), launched a voluntary certification scheme for AYUSH products which prescribes that AYUSH products should be certified by NABCB accredited product certification bodies. The National Medicinal Plants Board has launched a similar scheme jointly with QCI for certifying medicinal plants based on good agricultural and collection practices which would use NABCB accredited product certification bodies. The QCI Ready Mixed Concrete (RMC) Plant Certification Scheme, launched jointly with the Ready Mix Concrete Manufacturers Association (RMCMA) shall also rely on NABCB accredited bodies.

10.1 Importance of accreditation

Conformity assessment and accreditation, along with standards, are important parts of any nation's quality infrastructure. They make a significant contribution to the economy, health and safety, and environment by providing confidence in goods, services, management systems and people.

⁶² Article 6.1.1, TBT Agreement

Conformity assessment in simple terms is assessment of conformity to standards. It is the demonstration that what is being supplied actually meets the requirements specified or claimed. Conformity assessment can be applied to a product, a service, a process, a system, a body or organization or persons and includes activities such as testing, inspection and certification. The organizations undertaking these activities are referred to as conformity assessment bodies.

Quality infrastructure refers "to all aspects of metrology, standardization, quality management and accreditation that have a bearing on conformity assessment which is primarily testing, calibration, inspection and certification. This includes both public and private institutions and the regulatory framework within which they operate."

This institutional framework plays a vital role within the country, especially in context of rapid growth of global trade and value chains, and higher concerns with consumers and environmental protection. Accurately assessing the impacts of quality infrastructure contributes decisively to improving the understanding at the political, entrepreneurial and academic levels about the relevance of quality and, how they enhance the performance of economy and improve the outcomes of social, economic and environmental policies.

10.2 Role of certification and its demand

A certificate can also be issued on the basis of a private standard, such as the Forest Stewardship Council (FSC) and Social Accountability International standards denoting that the auditing process has been successfully completed against the requirements in the standard. Certification can be undertaken for products as well as for management systems. Although a certificate is sometimes requested by a buyer, the certification process is often initiated by suppliers in order to differentiate themselves in the market.

Specific benefits to various stakeholders are as below:

10.2.1 Benefits for Government

The MLA / MRA provides governments with a credible and technically robust framework on which to further develop and enhance Government-to-Government (G2G) bilateral and multilateral international trade agreements. The long-term aim is the fully accepted use and recognition, by both public and private industries, of accredited certificates and reports, in other countries. In this way, the free-trade goal of IAF and ILAC as stated above will be realised. As major procurers of goods and services, Governments also rely on accredited bodies for their buying decisions, as it provides confidence that suppliers have appropriate controls in place to deliver to requirements.

10.2.2 Benefits for Regulators

The MLA/MRA acts as an internationally recognised 'stamp of approval' to demonstrate compliance against agreed standards and requirements. Consequently, risk is minimised, as decisions will be based on reliable results. Duplication is also minimised as data included in submissions for product approvals can be evaluated without re-testing/inspection/certification. Many specifiers, such as government agencies, have recognized the importance of credible accreditation programs that are developed against internationally recognized standards. Accreditation and the IAF MLA/ILAC MRA help Regulators meet their own legislated responsibilities by providing a globally recognised system to accept accredited certificates and reports. With confidence in the conformity assessment process underpinned by accreditation, Standards can be used to support Regulations, which in turn means that businesses spend less time tied up with bureaucracy.

10.2.3 For Industry users

The MLA/MRA ensures that businesses that depend on accredited certificates / reports have greater confidence in the products they purchase or supply, because they have been generated by facilities assessed as being competent to carry out these specific activities.

10.2.4 For Manufacturers / Business Organizations

The MLA/MRA ensures that manufacturing businesses can derive significant savings. Rather than bearing the costs of setting up internal assessments to confirm the quality or the compliance of their products, businesses can choose the assessments of internationally recognised competent accreditation bodies that are IAF MLA / ILAC MRA signatories, and in addition benefit from the market access these MLA/MRA provides. Holding accredited conformity assessment results shows credible evidence of conformance with national and international standards and regulations which can differentiate a business from its competitors. As accreditation is recognised internationally, it can open doors overseas equally as well as those in the domestic market. Indeed, an increasing number of organisations in both the public and private sectors in domestic markets and overseas are specifying accredited testing, inspection or certification as a precondition to tendering for contracts. Accredited conformity assessment can also contribute to the operational efficiency of businesses in other ways, saving time and money by reducing bureaucracy and by helping with risk management and key aspects of decision-making. For instance, it can be used as a basis on which to make efficient and informed choices about domestic suppliers and promotes confidence in imports from other countries. It can also demonstrate due diligence in the event of legal action.

10.2.5 For Consumers

The MLA/MRA provides additional confidence to the general public and consumers on the product or the services they use. International accreditation agreements help increase the choice of goods and services available on the market and help to ensure that these meet relevant standards of quality and safety, whatever their country of origin at competitive prices. By preferring products and services having certificates and reports from accredited bodies, they can be confident that the products and services they use and/or their manufacturers or suppliers have been assessed by an independent accreditation body, that itself has been recognised as meeting international standards of competence.

10.3 Mechanism of accreditation & certification

It is the third-party attestation related to a conformity assessment body conveying formal demonstration of its competence to carry out specific conformity assessment tasks. The accreditation process determines the technical competence and integrity of organizations offering testing, calibration, inspection, verification and certification services. It operates across all market sectors, providing an impartial assessment against internationally / industry recognized standards, providing a transparent approach to conformity assessment in all sectors and supports Regulations across a growing number of policy areas.

The main function of accreditation is to assess the competence of the remaining quality institutions, i.e. to create trust of the economic agents in the quality infrastructure. For this reason, accreditation's most salient role is to amplify the impacts of each individual quality service and of the system as a whole. For instance, as accreditation ensures the correctness and independence of the certification process, it ensures the quality of the certified commodities to the consumer. As the credibility of certificates increases, producers reap more easily the benefits, which create incentives for further investment.

Accreditation may indirectly also contribute to increase in the quality of services. For instance, the evaluation of laboratories contains, implicitly or explicitly, suggestions to improve the performance of these laboratories. This represents a transfer of knowledge from the accreditation institutions to the assessed laboratories.

This element of quality infrastructure is especially important in the context of international trade and globalization of value chains. On one side, as long as the buyer trusts in the certified good, he does not need to do new tests in order to assess the quality of the good (avoid double testing), and on the other side, contracts are more easily settled, the penetration in foreign markets fostered.

Optimally, accreditation bodies are independent, impartial and recognized internationally. When that is so, they ensure competence, confidence, reliability, transparency and political independence. One of the

main functions of the accreditation element of the quality infrastructure is to strengthen the international recognition of the national quality system through international peer evaluations and signing of international Mutual Recognition Arrangements (MRAs), thus providing international equivalence to the reports and certificates issued by accredited bodies.

10.4 National interpretation of PSS

The National Interpretation is a mechanism to harmonise requirements of a PSS that normally would have been formulated in a country or a region that would be consuming the goods/commodities to that of country where the production and manufacturing process of commodity/goods is done. Since the standard is set in country different from where it will be used; there are situations that some of the clauses of the standard are either irrelevant or are not in line with the cultural practices of the producer country. This leads to a situation where the Standard owners tend to lose out a large production base due to producers not being able to comply to the standard due to technical reasons.

Of late, the Standard owners have been mindful of the situation and have now included options as national interpretation, national adaptations and benchmarking in order to have mechanism to revisit the clauses in the standard for greater acceptability in various geographies irrespective where the Standard was formulated.

We have a host of PSS including GLOBALG.A.P., RSPO, FSC that have mechanism built in their standard that assists the Standard owners review the Standard in the context of the production practise of the producer country in terms of its conformance to the national laws and regulations and/or the production ecosystems adopted. The national interpretation is done with the Standard owner normally getting into an understanding with an organisation in the producer country allowing him to undertake the process of stakeholder (public) consultation, reviewing the verifiers and include the field testing as part of the process. In all cases, the Standard owner reserves the right to accept or reject the interpretation so that the objectives of the Standard are not overtly affected. In all cases, the national interpretation is carried out as and when the Standard owner comes with a version change.

To cite an example - GLOBALG.A.P is established to set out voluntary standards for the certification of primary production. It establishes and harmonizes standards for Good Agricultural Practices around the globe. Since in each country the cultural practices may differ, GLOBALG.A.P has provided in its regulations for establishment of what is called the National Technical Working Group (NTWG) in each country to align the country-specific practices with the GLOBALG.A.P. GLOBALG.A.P seeks to gain qualified inputs from national experts in their own language with respect to interpretation as well as specific legal and structural conditions within the different areas covered by GLOBALG.A.P. The establishment of GLOBALG.A.P, NTWG is an important step towards this goal. Any interpretation guidelines as applicable in their respective countries developed by NTWG shall be placed before Global GAP for approval, and once approved, it becomes applicable to the respective country.

11. Public sector involvement w.r.t. PSS

Over the last 10 to 20 years, PSS have emerged as an important mode of market governance in many developed countries. PSS raise a number of issues due to the nature of their ownership and their development process, which is seldom sufficiently participatory, transparent and based on scientific evidence. As a result, some standard requirements and indicators may not be suitable to all producers, especially for those who are outside the area where the standard was originally developed. Complying with some PSS and demonstrating compliance requires substantial capital, time and skills. This problem is particularly acute for developing countries due to the lack of infrastructure and public finance to help domestic producers implement these standards. PSS can also be considered as disguised trade barriers.

There has been some discussions at the WTO level but no significant progress has been achieved as the issue of definition of private standard itself has not been settled. Since PSS have labour and environment standards, we have to guard against such issues being mainstreamed outside PSS. However since the PSS are here to stay, there is a need to create a hub to deal

11.1 Establishment and operationalisation of National PSS Platform

India needs a coherent strategy to deal with PSS – participation in their development wherever possible, and capacity building of industry and other stakeholders to promote compliance with them. The first step would be to identify a hub for such response. One possible organization could be the national standards body but it needs to relook at its processes to consider PSS as one target of its attention and introduce a multi certification body system.

More so important because India aims to be the manufacturing hub under its 'Make in India' initiative. It is important that Indian industry meets global standards acceptable in the world market for this initiative to succeed. Indian policy makers and businesses need to look at PSS as an instrument to address various sustainability challenges and increase the participation of Indian companies in international supply chains

Given that governments do not usually get involved with PSS having its hands full dealing with regulations of importing countries besides domestic regulation, it is ideal that an autonomous organization takes the lead to create such a platform, explore options and arrive at optimal solutions for overcoming challenges posed by market-driven PSS for boosting exports.

Alternately, a mechanism needs to be developed for identifying a host institution as the national focal point to handle the issue of PSS as they are now an integral part of global trade discourse. The identified institution needs to be equipped with the skills and agility to co-ordinate with other stakeholders to operationalise instruments such as interpretation, harmonisation, obtaining equivalence and seeking mutual recognition amongst the PSS. We need to appreciate that the evolution of PSS would continue to influence trade. Since the PSS are here to stay, there is a need to create a hub to deal with them.

QCI has expertise in providing internationally acceptable ways to demonstrate compliance to International Standards development of regulatory and voluntary frameworks relying on its accreditation services for third party certification / inspection bodies and laboratories and has earned international I equivalences at par with European or American accreditation bodies.

11.2 Sustainable public procurement – Learnings from Germany

Box 6. Sustainable Public Procurement | Case of North Rhine-Westphalia, Germany

Stakeholder Launch of the 2nd UNFSS Flagship Report "Voluntary Sustainability Standards and the Role of the Government Perspectives from Emerging Market Economies and Europe"

Panel Discussion: Strengthening the contribution of sustainability standards to the implementation of SDGs Friday, 21 October 2016 | BDI, Haus der Deutschen Wirtschaft, Breite Straße 29, 10178 Berlin

Input by Dr. Lale Akgün, Director, newtrade nrw

North Rhine-Westphalia is the most populous state of Germany, with a population of approximately 18 million, and the fourth largest by area. Four of Germany's ten biggest cities – Cologne, Düsseldorf, Dortmund, and Essen – are located within the state, as well as the biggest metropolitan area on the European continent, Rhine-Ruhr. Its economy is heavily based on industry, with the highest amount exports among the German states. However, since 2010 the State Government, headed by state premier Hannelore Kraft of the Social Democratic Party who is supported by members of the Social Democratic Party and the Green Party as heads of the various ministries, is deeply committed to the idea of sustainability and has adopted various laws to promote the topic.

Public procurement is decentralized in Germany as many of you already know. While the procurement of the federal government surely is of high interest, the bulk of procurement decisions and tenders are made on the local level. In the state of North Rhine-Westphalia public authorities consumes goods and services for more than 50 Billion Euro per year, its 396 municipalities are responsible for around 80% of this sum.

The enormous market power that lies in public procurement comes along with a high responsibility for the economic actions and decisions taken and made by public authorities, while representing also a leaver to positively influence the supply side. The government of North Rhine-Westphalia takes its responsibility seriously and started to adjust procurement laws since 2012 and now again in the beginning of 2017 in order to, first, give municipalities and other public procurers the option to integrate social and economic criteria into their tenders and, second, to implement basic requirements for procurement decisions. The decentralized structure of procurement and the principle of subsidiarity in Germany leave a lot of decision making power within the smallest units of government, while German states still have the power to constitute requirements on public procurement.

In public procurement, as it is implemented right now, voluntary sustainability standards (VSS) are playing an important role already, as they are often used to guarantee the fulfillment of standards set by law. They represent one way to proof that standards required by state law or by the procuring authority itself are fulfilled.

The UNFSS report is referencing towards public procurement as one of the ways governments can strengthen VSS and creating incentives for the use of such standards. From the experience of our work with procurers on the practical issues of sustainable procurement and from our work on the amendment of the Collective Agreement and Public Procurement Act of North Rhine-Westphalia (TVgG-NRW) we can clearly see that voluntary sustainability standards are in the center of attention.

Recent amendments of German law as a result of changes on the EU-level, make it now clearly possible to integrate social, ecological and innovative criteria into public procurement. The changes made it also easier for public procurers to refer to VSS in their tenders. It is now possible to directly refer to a certain standard and no longer necessary to specify the criteria used in that standard. Still, in the sake of competition law, other ways of proof of the required criteria apart from the named certification of the specific standard have to be accepted, but it is a huge step towards, making it easier for procurement officers to use

a VSS as baseline for their procurement. In addition the state law in North Rhine-Westphalia makes it clear that public procurement offices have the freedom to set such high standards as can be found in many voluntary sustainability standards. If procurers are looking for social criteria to add to their tenders, voluntary standards are often in the first line in order to get orientation. In the current Collective Agreement and Public Procurement Act, the Fair Trade standard is directly mentioned and it is made clear that tenders can include criteria matching this voluntary standard.

But this concerns the relation between voluntary standards and voluntary decisions by procurers. Voluntary social standards also play an important role when procurement law requires certain criteria from bidders to take part in public tenders. North Rhine-Westphalia went, as one of few, ahead in making the compliance to the criteria of the ILO Core Convention by bidders and their suppliers mandatory for bidding on public tenders. Through the Collective Agreement and Public Procurement Act of 2012 products from countries on the DAC list by the OECD that fall under one of eleven product groups, as information and communication technology, textiles, or agricultural products have to be produced under conditions in accordance with the conditions mentioned in the ILO Core Convention. By making certain social criteria, as the ILO Core Convention, mandatory for the bidders and their providers, a need for proof arises. How can procurers be sure that companies fulfill the mandatory commitment to implement the ILO norms along their supply chain, especially as those often lack knowledge about their supply chains themselves?

Exceeding the requirements of some state laws, as many VSS include, but also go beyond, the norms of the ILO Core Convention, such standards and their certification are a good way to know that the criteria by bidding on tenders are met. The control systems in place within many voluntary standards provide one of the best assertions of that, at this point in time. Other options, apart from standard based certificates, include self-declarations by companies, stating compliance with legal requirements, which bear the risk to distort competition. Companies can simply pretend to see to the implementation of ILO norms in their supply chains, especially when there is no control mechanism at work, as it is the case right now.

The amendment of the Collective Agreement and Public Procurement Act of North Rhine-Westphalia, that should become effective around January 2017, is taking these problems into account, and should rely even more on proof by third parties regarding the fulfillment of mandatory social criteria. Therefore, voluntary social standards may become even more important for public procurement as until now. The general jurisdiction of the act over all public procurement offices as well as the development of similar laws by other states will probably lead to a higher demand for standards and their certification.

At the same time the critique directed towards VSS is and will become even more pressing in the area of public procurement. Already there are complaints by procurers about the multitude and variety of the many different standards already in place. It means a lot of effort to understand, distinguish and choose between the different voluntary standards in order to integrate them into a certain tender or even to use them as guideline. Even more problematic becomes the process of checking if a specific standard or a certificate of this standard presented by a bidder complies with the legal requirements and is trustworthy. An internet database founded by the federal government, the Sustainability Compass (Kompass Nachhaltigkeit), may help with orientation but the variety of standards requires procurers to look into the various standards presented to them by companies. More efforts from all sides have to be made to help procurers with this.

Quality and trustworthiness of voluntary standards, especially as they are starting to proliferate and as an increasing number of organizations and standards are entering the market for standards, have to be held up and controlled.

The amendment opens legal opportunities to contract controls of the value chain itself, but up to now no mechanism that is easy to replicate and within a bearable cost-framework is accessible for public procurers. One of the projects of newtrade nrw is about testing the options of controlling supply chains and fulfillment of the ILO norms, as criteria that have to be fulfilled by the bidders or their suppliers in the production of goods, in public tenders. This would lead to a fair competition where companies have to act on the same baseline. Up to today, companies can simply claim to meet the criteria demanded. The main aim of these controls would be to level the playing field and discourage companies to use phony claims to bid on

public tenders, but also bidders who use a voluntary standard to proof their compliance could face such controls.

Opportunities to demand standards that are going beyond the legal requirements of the state law are rarely used by procurers. A rising number of pilot projects using higher standards, and often referring to existing PSS, shows that the issue gains traction, but as the use of a term "pilot projects" suggests, we are far from everyday usage of the possibilities at hand.

Our aim has to be, to foster a competition for sustainability, between companies but also between public procurers to reach a turning point in the general consumption of goods, were the demand-side as well as the supply-side both attach value to social standards in production chains. Voluntary social standards, which are used as benchmarks within tenders, are often going far beyond of what is required by law and therefore setting an example for other tenders. Public procurement in North Rhine-Westphalia and other German states and also across municipalities that are taking their responsibilities serious is therefore already increasing the impact of voluntary sustainability standards.

The task of state governments is to help public procurers fulfilling the legal requirements in their everyday work and even more to foster the use of higher sustainability criteria in everyday procurement.

The task of providers of voluntary sustainability standards would be to keep their standards trustworthy and accessible by, among other ways, strengthening transparency while keeping costs low.

Both are no simple tasks, but as long as social standards along the value chain are often not as high or as good enforced as needed and governments in the Global North do not fully implement UN Guiding Principles on Business and Human Rights public procurement has to become more sustainable, both on the basis of legal requirements and the consumption decisions of public authorities. This is also reflected by the Agenda 2030 and the Sustainable Development Goals which include public procurement as an important factor in reaching a more sustainable world. As one part of the sustainability strategy of North Rhine-Westphalia its Collective Agreement and Public Procurement Act is an important stepping stone to the SDG 12.7 "Public procurement should be sustainable". In the end public procurement is a form of consumption as any other, but with the potential to be used as a leaver to influence production as well as consumption practices. Voluntary standards do play an essential role in this, as they can contribute to SDG 12, concerning sustainable consumption and production and they might become of even more importance as procurers are looking for orientation for responsible decisions on ethical procurement, which in turn increases the demand for transparent, reliable and trustworthy voluntary standards.

Box 7: Recommendations of the 2nd Flagship Report of the UNFSS, 'Meeting Sustainability Goals: Voluntary Sustainability Standards and the Role of Government'

2nd Flagship Report of UN Forum on Sustainability Standards Concluding thoughts on role of government and public sector in the area of PSS

As VSS incrementally move from niche towards mainstream, their continued growth requires public authorities to consider whether such market-based systems can effectively function within existing (and emerging) policy and regulatory structures, and can meaningfully help governments meet their own sustainability goals and strategies.

The elusive promise of VSS to bring about transformational systemic changes to today's production systems will undoubtedly require amplified and concerted action in both public and private sectors. This would include large corporations using VSS to meet corporate sustainability goals and, more importantly, for governments to take more proactive measures to ensure that VSS contribute to public benefits.

As discussed, the impact of VSS is unclear, and for the most part deals with making stepwise changes to minimize negative impacts while perhaps not addressing the broader systemic issues. Though they are covering a growing proportion of the market share, they nevertheless are not bringing about the transformational changes that were expected, and a focus on commodity-specific standards might make small improvements but lead to other unintended sustainability impacts.

To make this bigger shift will require a rethinking of how VSS might be used within a larger suite of options and to bring about greater internalization of costs associated with conventional production.

Yet, the traditional dichotomy between a government setting minimal social and environmental regulatory requirements while VSS "ratchet-up" and push for beyond-compliance practices isn't as black and white as it appears. As we have seen, governments can and will need to play an important role in pushing certain VSS to perform better to meet policy objectives, or ensuring that VSS benefits are more broadly shared across their domestic economies and societies.

The future success of VSS, in terms of increasing market uptake, but more importantly increasing their sustainability impact, will depend upon a number of factors relating to the public sector, specifically by ensuring they more effectively meet public sector sustainability objectives. Some of factors that determine the success of VSS include the following:

- Governments have significant power via public policy levers to ensure credibility of VSS, as well as to promote better VSS outcomes by assuring coherence between VSS and public policy objectives.
- Governments' role is to ensure that VSS can contribute to local needs by managing issues such as the proliferation of standards, ensuring VSS are relevant to local contexts, and enhancing the economic mechanisms of VSS is inclusive.
- Governments have a critical role in establishing robust local governance systems and other needs (such as data and information) that enable VSS to function properly.
- Governments may work in coalition with civil society and the private sector to draw on different strengths of each sector in order to amplify the benefits of VSS.

- Governments that are signatory to major trade agreements may be able to use such opportunities to engage with VSS to ensure coherence between their trade commitments and VSS.
- At times, intergovernmental organizations will need to address areas of major conflict between VSS and public governance. The intergovernmental policy process confers a level of legitimacy required for uptake and acceptance of VSS.

These elements offer a starting point for understanding and achieving the success of VSS, which may lead to a much deeper analysis of the political economy dimensions of VSS. As we have seen, understanding local inabilities to overcome regulatory roadblocks will go a long way towards ensuring the ability of VSS to contribute to the achievement of governments' sustainable development goals.

https://unfss.files.wordpress.com/2016/09/final_unfss-report_28092016.pdf.

Note: The UNFSS Report uses the term Voluntary Sustainability Standards (VSS). In principle, the actions align with the approach towards PSS. The full report is available at:

12. India's Position at the WTO w.r.t. Private Standards and Environmental Measures

As compared to developed countries, developing countries are more vulnerable to the adverse effects of environmental measures and on market access and competitiveness. Various reasons are: Firstly, lack of infrastructural and monitoring facilities, limited technology choices, inadequate access to (and relatively more expensive) environmentally friendly raw materials and information are one set of reasons identified. Secondly, small and medium enterprises (SMEs) face more formidable compliance costs and there is an increasing emergence of environmental standards of export interest to them. Thirdly, developing country enterprises lack the skill and technology required for exploiting the positive trading opportunities generated by environmental measures. Fourthly, developing country exports are more vulnerable to market access barriers on account of their scale and sectoral composition. A connected problem is the diseconomies of scale due to small domestic markets. Finally, while developed markets are more amenable to harmonization efforts, developing countries have widely differing environmental standards in accordance with their national priorities, rendering harmonization both difficult and inadvisable as compared to mutual recognition and equivalence.

Many of these measures have an impact on the exports from the developing countries. Regulations on dyestuffs affect textile and leather sectors. For example, 20 azodyes are banned, mostly based on studies of rodents showing carcinogenic implications. Standards involving the use of certain chemicals based on the 'precautionary principle' affect textiles in particular. The presence of formaldehyde, glyoxal and PCP residues in cotton T shirts led to denial of market access to exporters. The effect is more significant on SMEs, as the costs of compliance could be prohibitive. For example, SMEs found it prohibitive to shift from PCP to Busan-30, the latter costing seven times the former. They also found it not to be viable to install effluent treatment plants in the tanneries sector and the Government had to provide assistance. Tea exports have been affected due to developed countries' concerns about pesticide content. Although Indian exporters adhered to the maximum pesticide residue levels recommended by US Environmental Protection Agency (EPA), stricter limits (e.g. 0.01 mg of tetrafidon and 2 mg of ethion per kg of tea) imposed in some European countries became insurmountable, there being, apart from other problems, a cost of \$234 per analysis.

Strict regulations in the food processing and agro-products sectors in some developed countries raise questions not only regarding viability of compliance costs but also on their environmental justification. The ban on the use of all hormones, natural and synthetic, in livestock production by the EU is an example. The ban is pervasive, not based entirely on scientific principles and may entail trade restrictions of proportions much higher than the risks that non-fulfilment may create. India may not be affected on this account as there is little use of hormones in India, but restrictions on milk/milk products from animals not being stall-fed has led to problems in market access. Marine products have been facing market access barriers on account of metallic, pesticide and antibiotic content (e.g. more than 0.2 per cent of benzoic content in shrimps from India compared to 0.6 per cent from elsewhere) or handling, processing and storage regulations, (e.g. strict EU regulations on packaging, treatment systems and transport arrangements). More recently, as a result of the development of HACCP requirements by some markets and even HACCP plus requirements by others, viz. Europe, additional compliance costs and social problems are emerging.

In addition to mandatory environmental requirements, voluntary measures also affect market access of Indian products. The most extensive voluntary measure is eco-labelling. Costs of compliance with eco-labelling criteria in the textile and leather sectors have been found to be prohibitive, compounded by difficulties in accessing technologies, developing testing facilities and verifying compliance. For example, the costs of compliance with eco-labelling schemes by Indian footwear exporters may be 33 per cent of the export price

Clearly, environmental factors play an important role in India's effort to achieve rapid and sustained export growth. The way forward could be the identification of sector specific examples of environmental requirements impacting export performance. Some requirements may generate positive spillovers in the form of new trading opportunities, either through niche markets for environmentally friendly products or through competitive advantages arising out of factor endowments. These provide "win-win" opportunities. Other requirements may affect exports adversely, if not addressed properly. Better policy choices may need to be identified here, along with increased awareness on the part of the business community and bilateral and multilateral initiatives.

Having identified the sectors and products that enable analyses of the trade-environment interface for export performance, improvements at various policy and practice levels are detailed. First and foremost is the availability of information. Information relating to environmental requirements abroad and available means of meeting them is of paramount importance. This will also involve transparency of requirements, including effective participation in their design and implementation. Harmonization where possible, and mutual recognition or equivalence where this is not possible, need to be addressed in this exercise.

Second, positive measures like capacity building, technology transfer and technical assistance could be strengthened nationally, bilaterally and multilaterally. Costs of compliance for SMEs need special consideration including collective initiatives for cost effective solutions. Similarly, technical assistance can be focussed on mechanisms that internalize externalities without putting too much stress on monitoring capacities of the government.

Third, infrastructural investment required to mitigate pressing environmental problems could result in a double benefit - capacity building from the development point of view as well as broad-based environmental protection measures resulting in better access to developed markets. A study of areas where price and other premiums are more likely to accrue could help in better focusing infrastructural investments.

Fourth, standard setting efforts have to be informed by their impact on trade and competitiveness, high costs of adaptation and irrelevance of many foreign standards to local conditions. Where environmental objectives could be met in a more trade facilitative way, unilateral trade measures should be avoided, and challenged through the supremacy of the multilateral trading system.

It is necessary to incorporate in the standards the uniqueness of the environmental conditions in each country. Rio Principle 11 states that "Environmental standards, management objectives and priorities should reflect the environmental and developmental context to which they apply. Standards applied by some countries may be inappropriate and of unwarranted economic and social cost to other countries, in particular developing countries." Therefore, there is a need to acknowledge that while certain environmental measure are prescribed to achieve the environmental objectives in the importing country, similar or greater environmental objectives could be achieved by some other measures in the exporting country. Such products which though not conforming to the environmental requirements of the importing country and achieving similar or greater environmental objectives in the exporting country should not be subjected to the environmental requirements in the importing country. The importing countries need to factor this flexibility into the design of environmental measures.

Trade and environment policies should be mutually supportive in order to achieve the objective of sustainable development. Environmental requirements should be developed and applied in such a manner so as to minimize the adverse effects on market access for developing countries, while still achieving the objectives of environmental policies. In this regard, it is the responsibility of importing countries when developing and applying environmental measures to ensure that:

- Members shall, in the preparation and application of environmental measures, take account
 of the special development, financial and trade needs of developing country Members, with
 a view to ensure that such measures do not affect the market access of developing
 countries.
- Environmental measures should be based on the criteria of sound science, transparency and equity. They must be compatible with the open, equitable and non-discriminatory nature of the multilateral trading system and confirm to its basic provisions and disciplines.

- Trade effects can be mitigated if foreign producers are given the opportunity to participate at an early stage in the design of environmental requirements and have adequate time to adjust to new requirements. While developing environmental measures, participation of developing countries needs to be ensured. Members shall promote suitable mechanisms for information dissemination systems to ensure that changes in environmental measures and standards can be accessed by industries in developing and least-developed countries.
- Longer time frames for compliance shall be accorded to products of interest to developing country Members so as to maintain opportunities for their exports.
- Exceptions should be provided to environmental measures in exporting countries, which are equivalent in effect with environmental measures in the importing country, though the measures themselves may be different.
- It also has to be ensured that when environmental measures affect the market access of developing countries, they should be assisted by way of bilateral technical and financial assistance for compliance. Such technical assistance and transfer of technology shall be provided and/or facilitated on concessional and preferential terms.
- The negative effects of environmental measures on market access should be mitigated or eliminated altogether by providing additional market access to developing countries in these products.

These inputs are derived from the submissions⁶³ of India at the WTO Committee on Trade and Environment.

 $^{^{63}}$ Submissions of India to the WTO Committee on Trade and Environment, WT/CTE/W/177, WT/CTE/W/207 and WT/CTE/W/244.

13. Conclusion and Recommendations

In the context of globalised manufacturing, it is clear that the content and focus of PSS will continue to evolve over the coming years. PSS are constantly progressing, as evidenced by the dynamic relationship between these standards and technical regulations. Some PSS have emerged from basic laws while others have come from the opposite direction and have been translated into legislation.

The growing importance and influence of private sustainability standards (PSS) has some clear causes. Consumers in developed economies, as well as civil society organizations in those parts of the world, are showing growing concerns about the social and environmental conditions prevailing in countries participating in the supply chains of products that are sold into their markets. As cases of severe breaches of workers' rights, human rights violations and environmental degradation caused by corporate activity reach the public, consumer confidence in the responsible conduct of the major brands and retailers decreases.

At the same time, these cases of misconduct indicate that national governments in developing countries often fail to enforce national and international norms and regulations. Consequently, globally operating companies find themselves faced with the challenge of responding to this governance gap.

As consumer awareness on production and consumption patterns grows, the desirability of differentiation in the market place in relation to social and environmental production criteria also increases. These developments have contributed to the response from large brands and retailers who are setting stricter standards within their supply chains with the aim of improving the social and ecological performance of developing country producers along the whole length of these chains. In essence, many multinationals use PSS as an instrument of supply chain management and as a mechanism to gain marketing advantage over rivals.

13.1 Government involvement

In the Standards Conclave in 2014, organized by the Department of Commerce, it was recommended that QCI should therefore act as hub of dealing with PSS in India and guide various stakeholders on how to meet the challenges posed by them. As a first step to that, the National PSS Plaform has been established and it is now recognised by the Platform that PSS on non-product-related processes and production methods that are related to certain safety, health, social, environmental and animal welfare requirements are increasingly being used in global supply chains. The compliance with them is becoming important for access to lucrative and dynamic international markets; this can also be an effective tool for achieving certain national sustainable development objectives.

The manner of demonstrating compliance to regulations is changing worldwide and more and more regulators are giving cognizance to voluntary initiatives by the industry. However, in some cases there has been a conflict between the regulation and PSS that results in the confusion amongst stakeholder. In such a scenario, the challenge is how the Governments can play a role in these standards.

One view may be to completely stay out of it and leave it to the exporters/importers to comply with them. Such a scenario may complicate the matters domestically. In majority of the developing countries, including India, the consumer is price conscious. Unless and until she is completely briefed about the benefits of a product which has complied with PSS she would not be willing to shell any extra price.

The second view can be that the Government can play an active role in these standards and try to bring them for discussions into trade negotiations. If the second view is followed then the following actions are suggested: Governments should engage with business and civil society to proactively address PSS, exploring ways to increase their uptake and 'common good' benefits while mitigating their deficiencies: One focus may be on ways to increase PSS uptake, e.g. through sustainable public procurement, government adoption / endorsement of PSS as well as consumer awareness campaigns. Joint efforts to harmonise the fragmented PSS landscape and to ensure and prove the inclusiveness of schemes are needed in parallel.

In addition to the above, the recommendations of the Second Flagship Report of the UN Forum on Sustainability Standards must be taken into due account and cognizance for assessing the government's involvement in extending support to the PSS landscape.

13.2 Formation of sectoral committees for handling sector-specific PSS issues

Globally there are a variety of commodities ranging from food to non-items that are traded. Each of the goods and the associated sector be it food, electrical, heavy engineering, electronics, software have its unique issues. As a country, India through QCI seeks to address sectoral issues by formation of sectoral committees under technical committees. Each of these committees shall have a secretariat with QCI for tackling issues arising in any specific sector. These sectors shall be a part of the PSS Platform which has been launched in India in as early as March 2016.

In addition to the PPGs identified in this study, sectoral committees should also be explored for other product groups.

13.3 Connecting with similar platforms/sectoral platforms internationally

National multi-stakeholder platforms on PSS, connected to one another through a 'platform of platforms' such as UNFSS, represent a viable option to share experiences and bridge coordination and implementation gaps: Such a platform has already been launched in India. Possibilities may be explored to launch similar platforms in other major developing countries. National platforms may connect to and support each other through UNFSS, inviting other global standards organisations to join the dialogue.

QCI in India has already been interacting with Brazil, Mexico, Indonesia, China and South Africa for bilateral co-operation. Mexico and Indonesia has already agreed to a common text for declaration enabling cooperation and exchange of information.

13.4 Addressing issue of PSS in inter-governmental events

In addition, governments, business associations, civil society and research institutions should seize the opportunity to put PSS on the agenda of the G20 and related outreach groups: Sustainable value chains are on the agenda for Germany's G20 presidency in 2017 already. The endorsement of global 'standards for standards' along the lines of well-established WTO criteria (transparency, openness, impartiality and consensus, effectiveness and relevance, coherence and development dimension) as well as ISEAL principles could be one of the objectives.

13.5 Increased stakeholder participation

The Platform must endeavour to reach out to as many stakeholders as possible to be a part of it and get involved actively in its work, deliberations and meetings. This effort must include stakeholders from diverse backgrounds – public, private, public-private, and government entities – who can add value to the collective learnings of the Platform.

13.6 Moving the Platform when faced by PSS issues

Stakeholders should be urged to move and involve the National PSS Platform as and when they face an issue regarding PSS. Producers facing a PSS can move the Platform to help them understand compliance procedures and best ways of deaing with certification requirements while keeping their costs effective with the business benefits of certification. On the other hand, PSS creating bodies can approach the Platform to understand the Indian sectoral temparement, environment and business norms in order to contextualise their standards for India. More so, the Platform can act as a funnelling point for issues regarding PSS in India. The Platform may also consider undertaking reviving of ecolabels and standards, such as DISHA, VRIKSH etc. created by statutory agencies, export promotion councils and quasi-governmental bodies.

13.7 Repository of information

The National PSS Platform must develop and facilitate a mechanism, preferably a information technology (IT) initiative, for creating a repository of PSS related information. This repository will help identify issues concerning PSS, create a collection of best practices for standards setting, facilitate compilation of information on small-producers' experiences with PSS, and lead to an active agenda-setting for capacity building for sustainability certification. The Platform should also actively partake in pushing for greater sustainability reporting, and explore avenues of doing so through the IT initiative.

13.8 Institute for Training on Standards and Conformity Assessment

As part of increasing awareness about standards in general and about the area of certification and conformity assessment, an institute addressing the same may be established by the Secretariat of the Platform. This was also highlighted in the First MSC Meeting of the Indian PSS Platform. Such an institute can also aid members of similar national platforms from cooperating countries to access it as a forum for learning and can enhance collaboration between economies on areas of sustainable development.

13.9 Exploring project-specific financing for the Platform

The Platform must also explore avenues of financing itself for conducting similar research on other product groups which might be taken up in the next phase. For the same, greater project-specific funding collaborations may be invited by the Platform to aid it in its work.

With these recommendations, it is expected that the Platform will be able to commence its work in the right direction in consonance with the understanding of temporal and spatial relevance for which it was envisaged to come into existence.

Abbreviations

APEDA:	Agricultural and Processed Food Products Export Development Authority
ASSOCHAM:	Associated Chambers of Commerce and Industry of India
B2B:	Business to business
B2C:	Business to consumer
BLF:	Bought Leaf Factories
BRC:	British Retail Consortium
CII:	Confederation of Indian Industry
CITES:	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CoC:	Chain of Custody
DARE:	Department of Agriculture Research and Education
DISHA:	Driving Industry towards Sustainable Human Capital Advancement
EEPC:	Engineering Products Export Promotion Council
EPC:	Export Promotion Councils
EPCH:	Export Promotion Council for Handicrafts
ETI:	Ethical Tea Partnership
EU:	European Union
FAO:	Food and Agriculture Organisation of the United Nations
FSC:	Forest Stewarship Council
FICCI:	Federation of Indian Chambers of Commerce and Industry
FLEFT:	Forest Law Enforcement, Governance and Trade
FLO:	Fairtrade Labelling Organization
FSSAI:	Food Safety & Standards Authority of India
GAP:	Good Agricultural Practices
GFSI:	Global Food Safety Initiative
GMO:	Genetically modified organisms
GOTS:	Global Organic Textile Standard
HACCP:	Hazardous Analysis and Critical Control Points
IDH:	Sustainable Trade Initiative
INDGAP:	Indian Good Agricultural Practice
IFOAM:	International Federation or Organic Agriculture Movements
ISO:	International Organization for Standardization
ITTO:	International Tropical Timber Organization
KPI:	Key performance indicators
MoU:	Memorandum of understanding
MNC:	Multinational companies
MMF:	Manmade fiber
MRA:	Mutual Recognition Agreements
MSC:	Multi-Stakeholder committee
NABCB:	National Accreditation Board for Certification Bodies
NGO:	Non-Governmental Organisations

NTWG:	National Technical Working Group
PEFC:	Programme for endorsement of Forest Certification
PNGRB:	Petroleum & Natural Gas Regulatory Board
PPG:	Priority Product Group
PSS:	Private Sustainability Standards
QCI:	Quality Council of India
REACH:	Registration, Evaluation, Authorisation and Restriction of Chemicals
ROI:	Return on investment
SA:	Social Accountability
SAC:	Sustainable Apparel Coalition
SDGs:	Sustainable Development Goals
SPS:	Sanitary and Phytosanitary
SQF:	Safe Quality Food
UN:	United Nations
UNCTAD:	United Nations Conference on Trade and Development
UNIDO:	United Nations Industrial Development Organization
WB:	West Bengal
WRAP:	Worldwide Responsible Apparel Production
WTO:	World Trade Organisation
WWF:	World Wildlife Fund
TBT:	Technical Barriers to Trade
ZED:	Zero Defect Zero Effect

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