Regarding the Sustainable Development Strategies and Perspectives of Consumers on the Lifecyle Time of Products and Service

Ayşenur Erdil and Erturul Tacgın

***Abstract*—A political commitment to measure the land, materials, water and carbon used across the supply chain to meet our current consumption levels. The basis of personal needs is not only the definition of the Ethical consumerism but also on the basis of the human needs of society and the environment consist of ethical consumerism. This means between ethical consumption and green consumption for a role to provide sustainability of the product lifecyle time**

The literature survey of the ethical fashion and style of the textile firms and using the sociable responsible marketing strategy has widely spaced. There is lack of reports, research area and analysis which consist of social, ethical and enviromental sustainability life for production and consumption in this region of bazaar, demand for goods or services. This study can provide general information and view of this topic and a new model approach considering balance of sustainable production and consumption for clothing sector

The aim of this paper is to identify the linkage between the sustainability dimensions is reporting and the financial performance of extensive social and environmental impact assessments should also underpin new legislation on the procurement, the environmental impacts of wasteful consumption of luxury items, including electronic goods, should be prioritised and also it purposes to evaluate the problems, topics of the social and enviromental sustainability in the textile-apparel industrial sector.

***Index Terms*—Consumption, enviromental impacts, financial performance, production, sustainability.**

I. Introduction

Sustainability consists of the phrase "triple bottom line" is extensively revealed defend that social and enviromental interests and sustainability impacts are very important for business extraordinary commercial and economic sustainability [1].

The products which reach the end of life after the life cycle time expectancy etwa one or two years are thrown away by users, consumers in the market. In opposition to single life goods, stuff (products-SCPs) are discarded after one-two times use by customers, and also in the other side Reproducers and remanufacturers reuse, use again after a treatment or after a series of procedures the products, goods which are named multiple (various) cycle products same as recyclable item of capable of being manufactured again.

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Life span of a product is very important in terms of sustainable development. Life span of a product can be increased via product durability.

Reporting from household production and using up, consumption may be justifiable and so one analysis's the results of production rate diminishes on municipal households in center profits and revenue country.

II. Lifecycle Assessment of Production and Consumption

Conductions, Stages through which globalisation may accomplish inequality are household production and consumption. The main focus of the globalization connected comprehensive inquiry to date has been middle-profits developing states, countries.

Lekkas et al.(1997) state that currently association, organization has distinguishing quality to conducting the powerful reprocessing of waste to recover reusable material exertion and extreme volume of waste of end user for sustainable management of raw material and resources and one or two time use. However, the innovation, the grade of technoogical development formally industrial and service sectors and also containing improvements of electronics and electrical sector cause to diminish the product lifecycle time-span , reuse and recycle possibility, disposal , volume of waste ascending industriously and transforming end of life progress, movement [2].

Jun *et al.* (2007) defined that utilizing appearing description technological developments for example wireless mobile telecommunication and product labeling provide the conception of closed loop product lifecyle and sustainability of management by recycling , using again the stuff and also remanufacturing , producing again adaptability without waste of material or effort, time. If lifecycle information labeling and recycling , reuse and remanufacturing are commanded, controlled and may be made as effective as possible, End of life discarded products and waste creation and products and goods consumption are diminished and minimized [3].

Other study has investigated how households allocate their time between formal wage markets and within household work, but has not explicitly examined the relationship between this allocation decision, globalizaiton and inequality.

Inequality remains a topic for future research .Household consumption is equally important as a channel through which globalization may impact inequality.

To the extent that household consumption depends on the relative position of households in the welfare distribution, globalization-induced price changes may affect inequality through consumption [4].

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Weizsacker and colleagues [5], [6] highlights that durability is an important strategy in terms of reducing waste and increasing material productivity. Besides, McLaren and colleagues points out that durability and reuse of a product is a crucial factor in terms of increasing overall efficiency in resource use [7].

III. Clothing Sustainability Style

Fashion business and the style life of consumers can be increased via ethical interests so, the merchants follows the ethical concerns and strategical policy. Some excellent brands provide to utilise "green" clothing and textile for their production system

The ethical clothing market focus on ethical style that is called "fashionable clothes that combine exhibition business fundamental laws with sweatshop-free work situation while not inconveniencing the environment or employees, by using ecological, biodegradable and organic cotton" [8].

Sustainability has a positive impact on a firm's long-term development. Sustainability commitment which extends throughout the product life cycle comprises issues such as the environment, ethics and human rights.

The apparel, clothing producing sector is a quite complicated and worldwide industry. An item of clothing travels around the world before it is branded and goes to the shop.

Clothing which develops constantly functions as a basic need:

-to protect us from the components and

-to capture intervention.

Production that gives harm to the environment has become an issue of priority and therefore consumer awareness functions as a crucially important factor since consumer behavior comprises choice of fashion and style as well as values and standard to means of manufacturing and distribution [9].

IV. Environmental Impacts of Production and Consumption in Textile Industry

A. Global Warming

Apparel, Garment production sector is a global network framework. For every kilogram of textile produced globally, the emission into the air is 2 kilograms of CO_2 [10]. During production of clothes, fossil fuels are needed for developing thread, manufacturing textiles and raw materials, manufacturing garments, transportation demanded for allotment, distribution, consumer treatment and waste. These stages of processes brings about Greenhouse gas emissions (GHG). The basis GHG are CO_2 from energy use, and CH_4 and N_2O from cotton manufacturing for textile sector.

Multiple cycle products (MCPs), goods can be reused or recycled, reproduced by the producer, manufacturer at the end of lifecyle time-span of products. Consumer demand increases fast with equal and lower environmental effects via products of customer satisfaction. Based environmental effects have increasing level concurrently with two life steps, orderly production and usage according to resource and material consumption, water, energy footprints, utilization and carbon emissions, water pollution and at stage of end of life cycle, depends on getting rid of decay and disposal [9], [10].

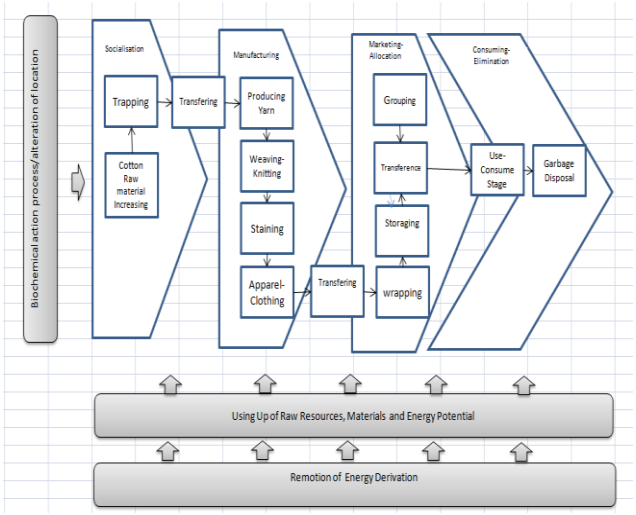

Fig. 1.The carbon consumption-footprint points out all greenhouse gas emissions along the all life cycle of production in clothing industry.

Multiple cycle products (MCPs) entrap, have extended value with the forms of energy, raw material resources and work force. Green products, stuff and useful device for sustainable improvement regard highly, admire very much by decreasing the influence of MCPs [10].

The concept of "throwaway society" is not researched very often. There is a relation between waste and consumption of household goods. Waste is related to consumer choice. There is a research about increased consumption and human happiness by Donovan and Halpern 2002 [8]-[11].

A model of sustainable consumption has been proposed by Hansen and Schrader [12], which proposes the model of consumer sovereignty according to which individual consumer behavior is seen as ethically neutral [13].

Slow Cities is a network of towns and cities which was formed in 1999. Its aim is to take the speed and stress out of urban life. Honore (2004) argues the benefits of a slower pace of life and objectives further implementations in the concept of work-life equality, medicine, and education [7].

B. Holistic and Integrative Perspectives

The governments should support the garment production sector in terms of developing alternative patterns of production and innov0ative systems.

Besides, end users must be informed about each production stage before deciding on what specific garment to buy.

The holistic importance of style is not in the product itself, but via the history that encloses it.

C. Waste-Disposal handling and Recycling

The majority of waste textiles are landfill. It will be significantly beneficial to divert textiles from landfill, which equals to that of wood and greater than paper, plastic, ferrous metal and glass [14].

According to DEFRA report 2007, estimated carbon benefits of diverting different waste materials from landfill is feasible by 2020 and amounts to 500 000 tones [11].

D. A New Model Approach

Appropriately, we want to support the ideal equality between consumption and production via model of "ideal

consumer behavior" that would provide valuable environmental, ecological development in the sector.

Fig. 2 depicts a model which purposes that longer product lifecycle time evaluate to eco-efficiency and slow consumption and enables potential development in the direction of sustainable production and consumption.

The term of slow consumption, which declares slowing the ratio, should be improved more.

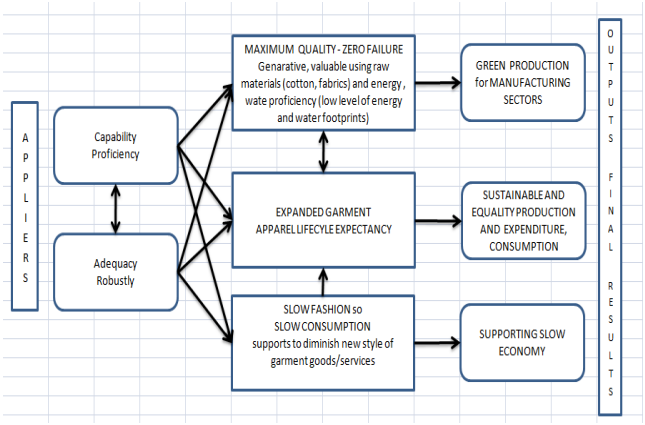

Fig. 2. Product life cycle time and sustainable production and consumption.

- eco-efficiency, by itself, leads to "green growth"
- sustainable development needs to be driven by both efficiency and sufficiency [13]-[15].
- the environmental impact of consumption should be reduced
- the throughput of products and service should be reduced.

The model thus indicates that longer product life spans provide a path towards sustainable consumption. Due to eco-efficiency, there is reduction of materials and energy throughput. Because products are carefully manufactured and maintained and there is less dependence on rising consumption for economic stability, the economy runs healthily.

"Design for durability" is a proper in the concept of technological advance development that diminishes other ecological effects of a particular action [16].

V. Designing for Longevity

Life-cycle thinking is important for design. Designers' interest in life-cycle thinking is partly being driven by public policy, which reflects a need to reduce waste, but also by their desire to improve understanding of products in terms of how carefully, intensively, and intimately they are used.

The E-SCOPE survey asked householders about their attitudes to product life spans. This revealed that the population is divided, almost evenly, on whether or not appliances last long enough:

- 45% behaved that they do not, on account of
- 50% declared that they do (the leftover 5% verbalized no perception).

It appears that people's views are reflected by their behavior and habits. Consumers who were satisfied with product life spans tended to get products repaired [11]-[15] [17].

VI. Conclusion

The OECD (2002b) recently concluded that the process of decision making by firms and households in terms of the design, production, use, and disposal of consumer durables is not well understood [17].

There is a lack of knowledge relating to the length of product life spans; therefore, more research is needed in the area of longer product life spans.

Themes are suggested;

- First, life span data on a wider range of consumer durables is needed.
- Better understanding about the environmental case for and against increased product life span should be developed.
- The relationship between market conditions and product life spans is important.
- life span extension strategies.
- Eventually, additional theoretical and empirical studies, comprehensive inquiries on state of being obsolete in distinctive product/service industries is required to assess the corresponding significance of economic, technological, social and psychological effects. The position of unique collaborators and shareholders also requires to be estimated, uniform and sociocultural measurements of obsolescence requires to be investigated.

How should we build a more sustainable future for clothing and textiles in the country?

For the first stage; consuming, using home-made and native clothes, consequently this basic activity that could diminish the environmental effect of the industry and also could provide for consumers to decrease the volume of garment and textile products they buy every year.

What would the 'ideal' consumer do?

What could the perfect and typical consumer do and how could he/she behave about the habits of purchasing the textile clothes?

We try to answer these questions via considering the theme and scope of this study.

To provide the most efficient environmental, ecological and social execution structure of the supply chain of apparel, clothing and textiles:

- Expand the lifecycle time of apparel and textile stuff via repair.
- Arrange of used garment and textiles products around recycling companies, centers which could recover them for derived, second-hand purchase wherever potential, however differently deduce and recycle the threads or fabrics.
- Buy, purchase second-hand textile stuffs and apparels.
- While purchasing new model goods, prefer to buy these made or produced with least harmful material, dangerous gas footprints.
- Rent garments which could oppositely not be dressed/put on until the end of the lifecyle expectancy time and essential life.
- Wash textile products limited frequently, at under decreasing heats and consuming eco-cleaners or detergents, dry clothes and keep away ironing where possibility.
- Not to go shopping to buy new fashion apparel frequency and purchase longer perpetual, eternal clothes and textile goods.

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