



SUSTAINABLE DEVELOPMENT THROUGH INNOVATIVE BUSINESS PRACTICES – A TBL PERSPECTIVE (CASE STUDIES ON NOVO NORDISK AND ITC)

Dr. Radha*

Introduction:

The Triple Bottom Line commonly referred to as TBL is a framework that incorporates three dimensions of performance namely social, environmental and financial. The TBL dimensions are also commonly called the three Ps: people, planet and profits. The action taken by the organizations to be financially viable, socially relevant and environmentally friendly is the foundation for sustainable development with TBL approach.

Economic variables otherwise known as the financial variables are those that deal with the bottom line and the flow of money and can focus on income or expenditures, taxes, business climate factors, employment, and business diversity factors. Economic variables include the factors such as Personal income, Cost of underemployment, the rate of establishment churn, establishment sizes, growth in Jobs, distribution of employment sector wise, percentage of revenue contribution and their contribution to gross state product, etc.

Environmental variables should include environmental factors which consist of air and water quality, energy consumption, natural resources, solid and toxic waste, and land use. Environmental variables include aspects such as chemical concentration, selected priority pollutants, electricity consumption, fossil fuel consumption, solid waste management, hazardous waste management etc.

Social variables refer to the contribution of the industry to the social dimensions of a community or region and could include measurements of education, equity and access to social resources, health and well-being, quality of life, and social capital. Social variables include unemployment rate, female labor force participation rate, median household



income, poverty, literacy, crimes per capita, life expectancy etc.

Even though triple bottom line has been the topic of discussion for a long time, many organizations have failed to understand the triple bottom line approach. There are a few organizations which pride themselves in following, reporting and publicizing triple bottom approach. This study focuses on two such organizations namely Nova Nordisk and ITC.

Novo Nordisk

Novo Nordisk is a global healthcare company with 90 years of innovation and leadership and well known for diabetes care, hemophilia care, growth hormone therapy and hormone replacement therapy. Headquartered in Denmark, the company employs approximately 40,000 employees in 75 countries, and markets their products in more than 180 countries. The main focus of the company is to enable the best for patients, employees and other stakeholders.

The business philosophy of Novo Nordisk is “The Triple Bottom Line”. The company believes that a healthy economy, clean environment and a happy society are fundamental to long-term business success. That is why the company believes in conducting business in accordance with the Triple Bottom Line business principle and pursues business solutions that maximises value to all the stakeholders. Whenever a decision has to be taken the company always considers the three factors namely financial, social and environmental variables to obtain sustainability in the long run. The company also believes in optimum utilization of resources to maximise their performance and enhance their contributions to the society as a whole.

Nova Nordisk is a company which believes firmly in the triple bottom line business and the principle is enshrined even in the articles of association that states that Novo Nordisk strives to conduct its activities in a financially, environmentally and socially responsible way.”The company prides itself in doing a responsible and sustainable business by

- Improving public health
- Creating awareness about early diagnosis and treatment
- Earlier diagnosis of health problems
- Better treatment facilities to even rural areas
- Healthier life for individuals
- Long and productive lives for people



The company also promotes ethically and socially sustainable environment with a host of ethical business practices. The company has been continuously topping the Dow Jones Sustainability Indexes (DJSI) for its consistent sustainable performance. The company also believes in the concept of complete stakeholder engagement so that it builds confidence and trust and also understands a variety of problems and issues surrounding the stakeholders. This helps the organisation in becoming more robust, socially responsible, financially viable and environmentally responsible.

NovaNordisk-TBL at a glance

Environmental	Social	Financial
<ul style="list-style-type: none"> • WWF Climate Savers Network • Copenhagen Climate Council • Prince of Wales Corporate Leaders Group • Climate Savers Program 	<ul style="list-style-type: none"> • Dawn Programme • National Changing Diabetes Programme • Biannual Customer Satisfaction Program • Stakeholder Relations 	<ul style="list-style-type: none"> • Addressing the health concerns with low cost high turnover drugs • Competitiveness • Trendspotting • Business Monitoring • Integrated Risk Management

The concern for conservation of environment and promoting a clean and green environment has motivated NovaNordisk to adopt many environment protection programs. With the constant climate change, global warming and hole in the ozone layer the company has taken upon itself the onus of saving the planet. The company has convened many conferences and workshops and created platforms for global leaders to form fruitful partnerships and take action against global warming. Being a member of the climate savers program organized by WWF NovaNordisk has convinced the business leaders that corporate should try to reduce the carbon dioxide emissions. The action taken by Nova Nordisk in this direction of environmental protection is to form a partnership with



DONG energy to devise a cost neutral way to reduce the carbon dioxide emissions and at the same time build the market for renewable energy. Concerted efforts to mitigate the climate changes have been on the top of the agenda and environmental protection has added the competitive edge to the sustainability efforts of the organisation.

In order to bring about social sustainability, the company has introduced and implemented many stakeholder friendly activities, the most important stakeholder being the customers who are patients. The “Dawn Programme” organized by the company conducts a global survey in collaboration with International Diabetes Federation and an expert advisory board. The survey focuses not only on the patient but also on the psychological aspect of diabetes. It has now evolved into a programme calling for concerted action to improve diabetes care. Today, more than 30 countries run the DAWN programme, involving academic research, educational programmes and new approaches to treatment at hospitals and clinics. To add to this Novo Nordisk is engaged in the DAWN Youth programme, which is a new global initiative

The bi annual customer satisfaction program is done to measure the level of customer satisfaction, find out the gaps in the customer needs and try to bridge the gap. Being aware of the customer needs, creating products and services to suit the customer needs and providing quality products at affordable prices has definitely improved the sustainability index.

ITC-An exemplary contribution to TBL:

ITC has evolved as the best example for sustainability through the three pillars of financial, environmental and social variables. ITC as an organisation has initiated many activities anchored around the TBL principles. The following are the contributions of ITC towards TBL and finally leading to increased sustainability.



ITC-TBL at a glance:

Financial	Environmental	Social
<ul style="list-style-type: none"> • Market Capitalisation 26%P.A • Dividends 26%P.A 	<ul style="list-style-type: none"> • Carbon Positive • Water Positive • Solidwaste Recycling • Environmental Health and Safety • Management systems at International Standards 	<ul style="list-style-type: none"> • e-choupal-rural digital infrastructure • Social + Farm forestry initiative • Watershed development initiative • Sustainable Community Development • Animal husbandry Development • Health & Sanitation initiative • Green centre

The organization stands on good financial principles and has garnered a market capitalization at the rate of 26% per annum and is able to declare dividends of around 26% per annum to the shareholders. The company also has the credentials of being carbon positive, sequestering and storing two times the amount of carbon dioxide that the company emits. Through efficient and effective rain water harvesting the company has remained water positive. By installing management systems at international standards to promote environmental health and safety the company has been the fore runner in protecting the environment. The company has also excelled in solid waste recycling and has been the top in environmental protection in the country. ITC is also the only enterprise in the world, of comparable dimensions to be carbon positive, water positive, and solid waste recycling positive for several years in a row. As a testimony to its commitment to a low carbon growth path, 38% of the total energy requirements of ITC are met from renewable sources. ITC's businesses and value chains generate sustainable livelihoods for around 6 million people, many of whom live at the margin in rural India.

The ITC e-Choupal initiative is a powerful innovative model that delivers large societal value by co-creating markets with rural communities. A network of village internet kiosks



e-Choupals enable even small and marginal farmers in rural India, who are de-linked from the formal market, to access real-time weather and price information, and relevant knowledge and services to enhance farm productivity, quality and command better prices by improving their competitiveness and capacity to manage risk. Complementing this digital infrastructure is Choupal Pradarshan Khet – customised agri-extension services, demonstration plots and training programmes that enable farmers to access best practices and diversify crop portfolios. The ITC e-Choupal initiative has emerged as an efficient two-way channel for a variety of goods and services, and raised farmer incomes, creating sustainable livelihoods.

Catalysed by the ITC e-Choupal network, ITC's Farm to Food Products value chain has emerged as a very successful example of value chain augmentation. Eliminating intermediaries and multiple handling, farmers gain from a transparent and efficient procurement channel, substantially higher incomes and crucial market linkages. Effective soil and moisture conservation strengthens farming systems, increases productivity and in turn the farm incomes. The ITC Choupal Social & Farm Forestry Programme innovatively combines business needs and social purpose by growing renewable plantations that simultaneously provide a viable livelihood option for wasteland owners, create a sustainable raw material source for ITC's Paper & Paperboards Business and also bring multiple environmental benefits.

The ITC Choupal Livestock Development Programme aims at assisting cattle-owners to upgrade their low-yielding indigenous stock through cross-breeding by artificial insemination. Comprehensive animal husbandry services are provided right at the doorstep through Cattle Development Centres managed by trained local community members. Cross-bred yields are significantly higher than indigenous stock, generating substantial supplementary incomes from surplus milk sales and paving the way for dairying to emerge as a viable livelihood option.

ITC believes that economic empowerment of women strengthens families and societies. It has therefore launched the ITC Choupal Women's Empowerment Programme to provide sustainable economic opportunities to poor women in rural areas. ITC assists them to form micro-credit self-help groups so that they can build up small savings and finance self-employment and small enterprises.



Open defecation remains an acute problem in rural areas where there is a lack of awareness regarding the causality between open defecation and health related issues, ITC's Health & Sanitation initiative seeks to address this serious issue by supporting the building and usage of low-cost family-owned toilets in rural areas. Intensive awareness generation programmes are customised and conducted to target rural men, women and children. Green buildings is yet another vital aspect in ITC's agenda for positive environment. Every new ITC construction is designed in accordance to internationally benchmarked green building norms. All its premium luxury hotels are LEED Platinum certified and several factories have received Platinum Green Factory Building certification.

Objectives of the Study:

1. To study the case history of two selected organizations namely Nova Nordisk and ITC in TBL perspective
2. To analyse the various financial, social and environmental variables impacting these two organizations and ascertain which organisation is better in these TBL variables

Methodology:

A visit was made to the branch offices of both NovaNordisk and ITC situated in Bangalore. General information about their activities were collected which formed the basis for the case study. Moreover, the employees of both the organisations were distributed a structured questionnaire to find out about the employee awareness about the TBL approach of their organizations. Efforts were also made to draw parallels between the two organizations to find out which did a better job in sustainability.

The primary data was collected from the employees of both NovaNordisk and ITC branch offices located at Bangalore. Structured questionnaires were distributed to the selected organizations and this was followed by in depth discussions. Data collected through structured questionnaire has been supplemented by personal discussions with the employees of both the organizations. This primary data has been tabulated and further analysed.

The secondary data was collected by reviewing the existing literature, journals, newspapers and by referring to the official websites of the selected organizations.



Awareness about TBL and Sustainability:

When the employees of both the organizations were distributed the questionnaire containing questions to determine the employee awareness about triple bottom line and also whether they knew about how their organizations contributed towards sustainability using the TBL bottom line the following was the response

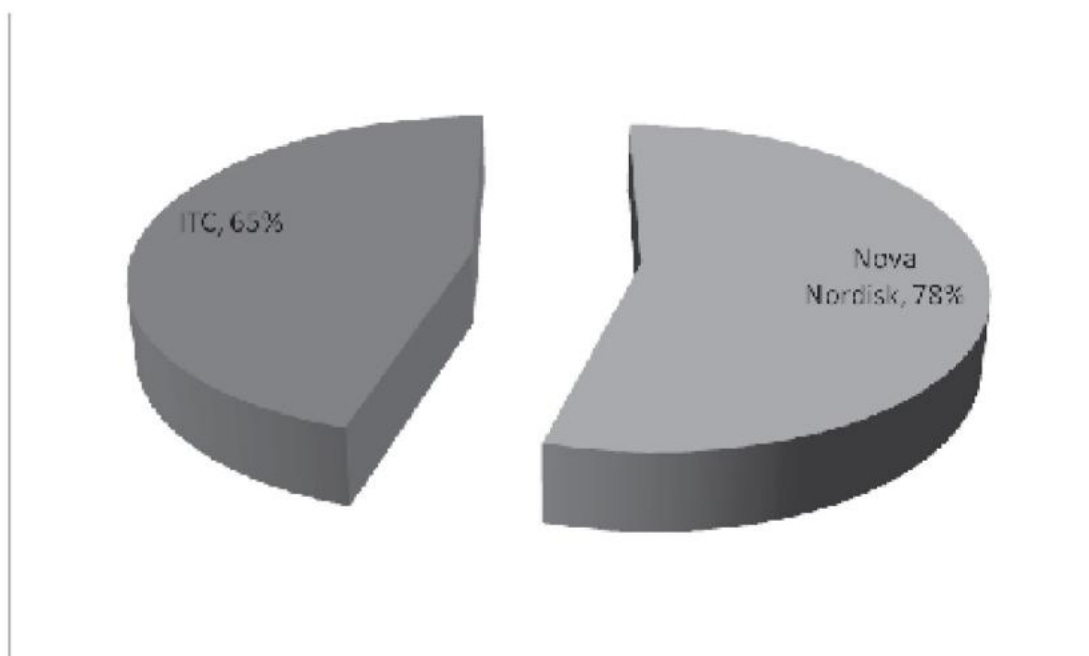
Particulars	Nova Nordisk	ITC
Aware about TBL	78%	65%
Not aware about TBL	22%	35%

Source: Primary Data

78% of employees of Nova Nordisk were aware about their company's contribution towards sustainability using triple bottom line approach. They were indeed proud of the fact that their organisation was a pioneer in this concept.

On the contrary, even though ITC is a well known company and it has contributed so much towards the society, only 65% of the employees were aware about the sustainability efforts on the foundation of sound financial, social and environmental principles. Amongst the two companies the employees of Nova Nordisk were better aware when compared to the employees of ITC

Employee Awareness about TBL Approach:





In order to evaluate both the organizations in terms of triple bottom line approach towards sustainability three hypotheses were formulated and they were tested.

Hypotheses:

The following hypotheses were formulated for the purpose of the study. The general hypothesis formulated for the purpose of MWW test is as follows:

Ho: The two populations are not identical

Ha: The two populations are identical

The specific hypotheses formulated on the aspects of social, financial and environmental variables are as:

1. Ho : NovaNordisk and ITC are not identical in terms of financial variables related to sustainability

Ha: NovaNordisk and ITC are identical in terms of financial variables related to sustainability

2. Ho : NovaNordisk and ITC are not identical in terms of social variables related to sustainability

Ha: NovaNordisk and ITC are identical in terms of social variables related to sustainability

3. Ho : NovaNordisk and ITC are not identical in terms of environmental variables related to sustainability

Ha: NovaNordisk and ITC are identical in terms of environmental variables related to sustainability

Mann-Whitney-Wilcoxon Test (MWW Test)

MWW is a non parametric test that can be used to determine whether a difference exists between two populations. The advantage of using this test is that it is not based on a matched sample. Two independent samples one from each population can be used. This non parametric test does not require interval data or the assumption that both populations are normally distributed. The basic requirement of MWW test is that the measurement scale for the data is at least ordinal. In that case, instead of testing for the difference between the means of the two populations the MWW test determines whether the two populations are identical.



The hypothesis for MWW test is as follows

Ho: The two populations are not identical

Ha: The two populations are identical

The first step is to rank the combined data from the two samples from low to high. The lowest value receives a rank of 1 and the highest value receives the highest rank. The next step is to sum the ranks of each sample separately. The critical values of the MWW, T statistic is provided in the table. n_1 refers to the sample size corresponding to the sample whose rank sum is being used in the test. The value of TL is read directly from the table and the value of TU is calculated as follows

$$T_u = n_1(n_1 + n_2 + 1) - T_L$$

The hypotheses have been tested using MWW test using the economic, social and environmental variables and the findings have been listed with meaningful conclusions drawn out of it.

Analysis and Testing of Hypotheses:

The data collected from the structured questionnaires was tabulated and MWW technique was used to test the hypotheses.

Score obtained by Nova Nordisk	Rank	Score obtained by ITC	Rank
70	1	151	11
124	7	153	12
104	2	115	5
128	8	148	10
113	4	139	9
110	3	121	6
T=	25		53

Test carried out at 0.05 level of significance

TL is read directly from the MWW table where $n_1=6$ and $n_2=6$ representing the six variables which has been considered for each aspect of TBL in collection and analysis of data



$$TL=27$$

$$TU=n1(n1+n2+1)-TL$$

$$TU=6(6+6+1)-27=51$$

Reject H_0 if T is less than 27 or greater than 51

Since $T < 27$ the null hypothesis is rejected. Nova Nordisk and ITC are identical in terms of financial variables contribution towards sustainability. Both the organizations believe in the concept of profitability and sustainability but do not believe that it is only profit that is important. Both the organizations believe that profit is one of the aspect and not the only aspect. Both the organizations are firm believers in social cause and social responsibility.

Impact of Social variables on Sustainability:

H_0 : NovaNordisk and ITC are not identical in terms of social variables related to sustainability

H_a : NovaNordisk and ITC are identical in terms of financial variables related to sustainability

Score obtained by Nova Nordisk	Rank	Score obtained by ITC	Rank
18	1	20	4.5
22	9	19	2
20	4.5	21	7.5
20	4.5	20	4.5
24	11	21	7.5
23	10	25	12
T=	40		38

Test carried out at 0.05 level of significance

Since the value of T is greater than 27 H_0 cannot be rejected. Both Nova Nordisk and ITC are not identical in the contribution of social variables towards sustainability. Nova Nordisk has many social variables contributing towards TBL and sustainability but, ITC scored better in this aspect. Many schemes introduced by ITC have been rated as far more impactful and important.



Impact of Environmental Variables on Sustainability :

1. Ho : NovaNordisk and ITC are not identical in terms of environmental variables related to sustainability

Ha: NovaNordisk and ITC are identical in terms of environmental variables related to sustainability

Score obtained by Nova Nordisk	Rank	Score obtained by ITC	Rank
22	2	27	5
30	8.5	28	6
34	11.5	25	3
15	1	29	7
31	10	30	8.5
26	4	34	11.5
T=	37		41

Test carried out at 0.05 level of significance

Since T is greater than 27 the null hypothesis cannot be rejected. Therefore, it can be concluded that both Nova Nordisk and ITC are not identical in the environmental variables impacting sustainability.

Findings of the Study:

1. A study of the two organizations has revealed that the employees of Nova Nordisk are better aware about their company and their TBL approach when compared to the employees of ITC. The awareness level of ITC employees was less when compared to the awareness level of Nova Nordisk employees.
2. Nova Nordisk and ITC are identical in terms of financial variables related to sustainability. Both the organisations are earning good profits, but, it is not at the cost of the stakeholders. The stakeholders are well taken care of and this healthy financial aspect has paved way for more economic and environmental activities.
3. Nova Nordisk and ITC are not identical in terms of social and environmental variables related to sustainability.



4. ITC has an edge over Nova Nordisk in following TBL principles. The schemes and upliftment programs of ITC has made a heavy impact and given more empowerment to the rural areas, farmers and women in particular.

Conclusion:

The study has revealed that both Nova Nordisk and ITC are leaders in their own way in promoting sustainability through effective play of financial variables, use of social variables and environmental aspects. Both the companies are leading a concerted effort in this direction. But, awareness about their role and contribution is not very high. If the companies are able to raise the awareness level of all stakeholders and impress upon them the good work done by the companies in socially uplifting the society, protecting the environment and at the same time maintaining the profits to ensure sustained livelihood to the people around, to the employees, to all other stakeholders. In a nutshell strive to become socially relevant, environmentally caring and be fruitful all the way and let the entire world be aware about it is the need of the hour.

“We have 17% of the world's population, but only 2.4% of arable land, 4% of water and 1% of forest resources. The seed of unleashing this transformative capacity for the larger good of society lies in defining a super-ordinate purpose of business.”

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