

GOVERNANCE AND ROLE OF STATE IMPACTING THE GREEN INDUSTRY

Dr. Suvasis Saha*

*Professor,
Department of Business Management
University of Calcutta,
Kolkata City, INDIA
Email Id: dr.suvasis123@rediffmail.com

DOI:10.5958/2278-4853.2022.00008.8

ABSTRACT

Institutional norms and state policies are very important for defining equitable and sustainable use of the resources of the planet in which private sector plays a vital role more so in case of India. The focus of this essay is more in relevance to the country India. The governance impacting the private sector practices with particular attention to resource management, benefits and reduced cost associated with the green businesses).

KEYWORDS: *Governance, Puritans, Quakers, Republican, Marxists, Aristocrat, Trend Setters, Rational Buyers, Net Workers, Stake Holders, Liberal Consumerism, Rational Consumerism, Critical Consumerism, Radical Consumerism, Green Wash, Libertarian Extension, Ecological Extension, Conservation Ethics.*

1. INTRODUCTION

Introduction: Governance is all the processes of interaction be they through the laws, norms, powers or language of an organized society [1] over a social system (family, tribe, formal or informal organization, a territory or across territories). It is done by the Government of the state, by a market, or by a network. It is a decision making among the actors involved in a collection problem that lead to the creation, reinforcements or reproduction of social norms and institution. True, a variety of entity can govern, the most common and paramount importance is given to government as it is presumed that majority is represented by the elected majority. Other types of governing could also be socio-political groups who in case of green could be reflected as the Puritans, the Quakers, the Republicans, the Marxists, the Aristocrat and the Systems groups. Each of these groups have had their own norms and in their quest of research the norms have been explicitly depicted [2]. The consumerism depicted by them are the following.

Groups	Beliefs and norms
Puritan	Consumption culture is spiritual and therefore it defiles that which is holy by destroying land, polluting air and water and needlessly killing flora and fauna.
Quakers	Consumption culture is wasteful and ignores its true costs

Republican	Consumption culture encourages civic irresponsibility.
Marxist	Consumption culture is based on social injustices
Aristocrat	Consumption culture is threat to the survival of the system
Systems Perspective	Consumption that seeks to impose order on complex dynamics by conceptualizing patterns of related objects and processes as systems.

While we talk of such groups it is implied that these groups need not be always formal, they could also be in form of formal and informal and they guide the consumerism patterns that largely the private sector addresses. These stakeholders are loosely held yet inter-twined in form of local publics, citizens' forum, government publics, media publics and financial publics, etc. "Governance is the way, norms and actions are structured, sustained, regulated". The norms, actions and structures refer to minimization or mitigation of risk out of commercial exchange and often get a formal shape in terms of Industry. Therefore Governance and Industry are two sides of the same coin.

2. GOOD GOVERNANCE

Good Governance is the goal of both the formal organization and informal organization. The organization. The organization that is formal and profound under the present democratic systems is 'Government'. The Government exhibits its action through regulations. The relationship between Government Regulation and Governance is stated as under:

GOVERNMENT REGULATION	GOVERNANCE
State actors and government	Government, industry, non-government organisations, public, etc.
Government authorises	Government participates, steers and guides
Command and control regulation	Collaboration and negotiations between actors
Minimal actors/administrators	Many actors/stakeholders
Homogeneous information	Heterogeneous information
One size fits all	Different jurisdictional and spatial scales
Knowledge flows from the top down	Knowledge flows between actors
Predicted on existing knowledge	Emphasizes continuous generation of knowledge
Change is slow	Dynamic, evolving, iterative processes
Static management plans/ policies	Adaptive co-management plans
Plans takes years to change	Plans respond to system feedback-iterative

The whole facts of good governance culminates to two moot points the performance and the compliance. The governance principles are the following:

1. Direction (including Viability and Sustainability)
2. Stakeholder engagement (prime is handling the consumer public and issues of consumerism)
3. Risk Management
4. Performance Management

5. Compliance

6. Feedback and Reporting on it (Ethics init)

1) Direction:-

The Prime Minister of India Mr. Narendra Modi made the country proud in COP26, the ongoing climate summit at Glasgow not only catching the world on backfoot by committing Net-Zero pledge by 2070 [3], but also nudging the developed world to accept the terms of the developing world. The Prime Minister announced five tangible goals⁷, these are the following;

1. Net Zero emission by 2070
2. By 2030 reduction in projected emissions by 1 billion tones.
3. By 2030, reduction in GDP's carbon intensity.
4. By 2030, achieving installed non-fossil fuel generation capacity of 500GW
5. By 2030 meeting half of India's energy requirements from renewable resources.

Our Indian Prime Minister, called for an Rs75Lakh crores climate fund from the rich countries to help the poor nations with mitigation and adaptation. Therefore, the industry policy will be two irrespective of its nature of business the 'Mitigation and Adaptation'. Non-fossil includes besides renewable like solar, scalable nuclear power, wind energy (electricity) and hydro- electricity. The role of green hydrogen based technology will bring sea change in the system, size and design of the process, delivery of value and technology to follow. Added support will come from electrolyses and green steel. Time will only say is it achievable or will need to be revisited by our government, none the less it is true it is indicating the direction of Indian Economy and the major shift of industry. Massive investment is required and the growth of this investment will be generated and super powers of non-fossil economy will be Western and the Southern States since the East and North will be badly impacted. The coal belt will face spiral loss of income and unemployment with estimated 20 million plus workers losing their breads and high income uncertainty will prevail. The coal based infrastructure, upward and downward supply chain and the tertiary sector feeding the coal industry with value generation will be badly impacted.. Thus unbalanced economic growth during the next 30 years will be witnessed by Indian and new opportunities will arise. An October study by the Council on Energy, Environment and Water (CEEW) [4] outlined 12 sectoral path ways for India fit were to attain the pledge. However, there exists a confusion on whether the target is all greenhouse gasses (GHGs) or the CO₂. If it is GHGs then India is complaint at 1.5°C warming but if it is CO₂ it is only 2°C complaint. India represents 1/6th of humanity and has the largest cohort of young people in the range from 0.1 till 44 years are 81.4% who can be trained in Science, Technology, engineering, mathematics and the creative arts whose imaginative, innovative combination alone can halt, if not reverse the climate change. India also has third-largest Unicorns in the world, behind only the US and China [5]. The startup culture is catching on, the fresh Indian entrepreneur have gone past the stage of trying to build Indian imitation of the foreign success and therefore will be able to factor in the conditions of leanness and artificial intelligence to business and supply chains supporting the mitigation of GHGs and CO₂ emissions and develop new structure, size and design of industry. The last yardstick against which a firm was measuring was by following Paris Agreement. Today, one finds that Mahindra has committed to aligning its operations with the science-based

target [6]. Paris Agreement is a voluntary agreement in which countries are free to choose their climate targets, called nationally determined contribution. The Paris Agreement is, therefore based on the goodwill and moral persuasion. The assumption is that goodwill will prevail, countries will enhance their targets and collective action would meet climate goal. The Paris Agreement drafted on December 12, 2015, signed on April 22, 2016 and came into force on November 4, 2016 has 196 nations' states as signatories. Its goal is to limit global warming well below 2 degrees Celsius and preferably to 1.5 degrees Celsius the frame work of reporting for the country is Enhanced Transparency Framework (ETF). But, the fact is every country is looking out for its own narrow interest. The previous Donald Trump and China have had reservation on the limit of commitment, therefore are committing to do as little as possible this is the Achilles heel of the Paris Agreement. Thus, the agreement may not be able to limit warming below 2 degrees Celsius. Today, more than 2/3 of the world richest 100 entities of the planet are corporation and not governments. And just 100 firms have been responsible for 71% of the global emissions since 1988, the year Intergovernmental Panel on Climate Change (IPCC) was established. Corporations, therefore, are the source of this emission and then again will be ultimate of solution and not Governments. They have the resources to decarbonizes, and could make the target for any nation state to achieve. Of course there has been efforts to make organizational performance measurement holistic. The most successful one has been Robert Kaplan and David P Norton's the 'Balance Score Card', which achieves its balance by incorporating financial and non-financial parameters, outcomes and inputs and but short-term and long term actions across four perspectives- financial, customer, internal processes and learning and growth. It did not include environment therefore with focus on environment one has to follow the Paris Agreement and the COP26. At the end of the Glassgowconference of course one in COP 26 has found the developed world dragging its feet on the issue of yearly fund to the developing and less developed countries again, not only so instead of complete end of use of all coal and phase out of fossil fuel subsidies the chair released the draft proposal-"the phase-out of unabated coal power and of inefficient subsidies from fossilfuel".

In India, TATA's have also strongly signaled that they are moving out of the coal sector and moving into renewable energy, electric vehicle and hydrogen based steel making. RIL is planning multi-billion dollar investments investment in hydrogen, wind, solar, fuel cells and battery to become one of the world's top 'new energy' companies. Reliance Industries would become a net zero-carbon company by 2035. Adani is investing hugely in the solar business to become the 'world's largest' green enterprise. At the recent G20 summit Prime Minister Narendra Modi also said that the country has been taking concrete action to meet and even exceed the Paris Agreement targets. [7]

The other conventional metrics for the firm is the conventional 'Triple Bottom Line', the approach is correct but it varies from country to country in regard to the priority of the variables and the number of the variables and it is not mandatory in India. Basing this approach different Government of different states have taken different methodology of assessing the natural capital, human capital and profit. Whichever Industry comes up the market is the focal point since it is market that need to be accessed. Therefore, one need to study the market. The market is addressing the need of the consumer and the generic groups that are classified into three. Based on the values that are sought by customers, the customers could be grouped into the following three segments: a) Trend Setters, b) Rational Buyers and c) Net Workers.

TABLE: THREE GENERIC SEGMENTS

Trend Setters	Rational Buyers	Net Workers
a) State –of-the art Product	a) Re-engineering	a) Nurture a culture of commitment and trust.
b) Speed to the market.	b) Benchmarking	b) Market focus.
c) Re-invent the industry.	c) Cost-cutting	c) Customization.
d) Get different	d) Excellent services	d) Build relationship.

The generation it will address is largely the 'Net Workers' or some who nurture a culture of commitment and trust, understand value in their own terms with urge to solve finding a customer within a customer and building a community which is more reliable than family or peers. Kotler has referred them as 'Netizen'.

3. STAKEHOLDER ENGAGEMENT

The stakeholders in other facebook of social accounting represent themselves through consumerism. Antonides and Van Raaij have distinguished different types of general consumerism in reference to underlying political and social commitments [8]. The following are the types enumerated below.

1. Liberal consumerism which focuses on looking after the rights and increasing the powers of the consumers in the markets.
2. Responsible consumerism, that focuses on the societal responsibility of consumers.
3. Critical consumerism which focuses on questioning some features of the prevailing consumption system, e.g. demanding legislation and government action for better and safer products.
4. Radical consumerism that focuses on attacking the capitalist ideology of consumption, i.e., the inequity that prevails in the social system.

The four types of consumerism stated above of Antonides and Van Raaij as mapped by the author on market domain turns out as stated in the table below

TYPES OF CONSUMERISM	DOMAINS OF MARKETING
Liberal consumerism	Defining the market and understanding the value.
Responsible consumerism	Determine the value proposition.
Critical consumerism	Deliver the value.
Radical consumerism	Monitoring the value

Addressing these domains of marketing is bringing in the concept of how to meet these objectives in a world that is largely well connected virtually and is being forced to look towards a buyer oriented market where buyers are to answer with each occupied with not only to the firms offer but to another buyer and a virtual community with blurred vision of ethics. While the author is talking to organic farming in India it has its own dimension where genetically modified seeds are not acceptable but in countries like Cuba which as state policy has organic farming

permits genetically modified seeds. This in fact opens up the domain of responsible consumerism and critical consumerism with networkers' way of developing business. The firms have to therefore depend on 'Radical trust [9]. The term 'Radical Trust' refers to trust bestowed on others when organization shift control to their customer and users.

The biggest stakeholder is the state government who has to meet the COP26 target as part of Central Government's commitment as well as convert it to business opportunities for local business community always places itself as proponent of 'Liberal Consumerism' by defining the market and understanding the value. The Government of West Bengal in this regard has taken the initiative of transforming its public vehicle fleet from being petrol or diesel oriented to Green fuel namely electricity, liquefied petroleum gas (LPG) and compressed natural gas (CNG) by 2030. This means adopting of electric vehicle s will generate new investment, generate jobs double that of IC engine vehicle manufacturing, intercity electrification of green routes with 1 lakh electric charging stations. Similarly, responsible consumerism is evidenced where in NGO Sunderban Green Environment Association (SGEA) using community volunteers has been able to plant 10 lakh saplings of mangroves over 10 km embankment maintaining the diversity and thereby giving space out to not one variety of mangrove but based on land the available 30 varieties. This NGO is using community as well as stopping economic leakage from the place of incidence. The proposition is clear bio-diversity be maintained as sustainability with no economic leakage this is definitely the part of critical consumerism also. Radical consumerism is being noticed where in one finds the 105 countries in the COP26 summit have pledged to reduce the Methane emission by 30% from 2020 levels by 2030. CO₂ after all is not the only greenhouse gas of concern IPPC research states that a quarter of global warming at the doorstep of CH₄ instead. The question is whether the industrialized meat production system will be part of reform-globally 32% of anthropogenic methane emission come from the livestock sector. Therefore, one has to understand how to produce meat which is part of the climate solution. Question is why has India not signed on it as yet? In this respect India with its paddy cultivation method and livestock which is source of 8% of CH₄ emission. ICAR for example has developed a feed supplement for livestock that cuts down the methane emission by 17-20%. India must be part of 'Green Meat' production which could be either synthetic or lab grown as in case of Singapore which is essentially laboratory production. This is the outcome of monitoring the value and source of new production Lab grown "it is made by growing muscle cells in a nutrient serum and encouraging them in muscle like fibres" according to India-based magazine Swarajya [10]. Lab-grown chicken meat made a historic debut in Singapore. It was introduced by a startup 'Eat-just' in December 2020at restaurant '1880' in Singapore. Singapore is the first country to approve the sale of cultured meat. Demand for sustainable meat alternatives is rising. This is due to growing concerns about the environment & animal welfare. Meat consumption is projected to increase more by 2050 and these alternatives play an important role in ensuring a secure foodsupply.

4. RISKS MANAGEMENT IN THE GREEN BUSINESS:

One would ask the firm(s) to be realistic and not optimistic. Their adrenalin rush should not act as blinkers on the eyes. The genesis of risk comes under three categories these are namely:

Unrealistic views of markets: expecting customers' to take pains by expecting acceptance of low quality & service and/or premium price or assuming customers will readily accept a radically

different product to the one they used to.

Bursting of Balloons: Investing in immature or ineffective technologies and/or not have the right supply chain

Green Wash: Overstating your case and getting found out, or not being able to deliver on promises and having to back out.

The author here in will push in his observations while deliberating on some of these categories. One for benefit of the readers will elaborate on each of these categories.

The reason of organic cereal not catching up in the market is because the price of the product stands to vary between the escalations clauses of 130% to 150% this is the understanding of the author who has worked on organic vegetable projects. People respond to Value Innovation [11] and nothing less. The prices should be coming down and the offering value should be high. The organic rice or organic wheat (not default organic) will be adopted only when it reaches the consumers at prices that are at par with the non-organic. The unrealistic view of market does not lead to commercialization as after trial it fails to get growth.

The Bharatiya Mazdoor Sangh said it opposes the proposal of WTO [12] on banning subsidies to fisherman in the name of illegal, unreported and unregulated fishing by unorganized sector fisherman. WTO is right in doing this as lot of literatures are showing that trawlers are depleting some of the marine fishing reserves of deep sea and even coastal belts at un warranted rates. The Sunderban Bio Reserve is facing similar problems but owing to votary banks it is left and therefore the Hilsa Fish population while nesting get caught and the reserve is depleting. On the other hand, the logic is that the local fishing community will suffer as livelihood will get affected, this is a clear case of Green Wash.

5. PERFORMANCE MANAGEMENT OR VALUE

Method of assessing values refers to developing some index where in the contribution to green could be recorded. The balanced score card by Kaplan [13] did come with some approach of assessing the value but failed to record the green element in it. It is plausible that it may have been due to the fact that at that time it did not do so since at that time including green was only in its nascent stage.

The balanced score card included data elements across four perspectives, namely, financial, customers, internal process and learning and growth. One has come a long way, since 2015, Harvard Business School's 'CEO 100' ranking not only is based on financial performance but also on environmental, social and governance (ESG) filter. It has used ESG score to account for 20% of the each CEO's ranking. Microsoft in 2019 received No1 rating for both environment and social within the Institutional Shareholder Services (ISS) Environmental and Social Disclosure (E&S) Quality Score, which measures corporate performance on 200 factors. One drives in the fact that ESG index is extremely becoming important [14].

One important way is to incorporate Extended Producer Responsibility (EPR) [15] and say Plastic Waste Management (PWM) in case of India. India did take effective steps to import ban on plastic scrap in 2019. Firms too are doing their bit including plastic users such as sports gear makers. Adidas as well as plastic generators and processors such as petrochem giant Reliance Industries Limited (RIL) and packaging major UFlex. Under the 'Run for the Ocean' initiative,

Adidas has sold 11 million pairs of shoes made from up-cycled marine plastic waste in 2019. UFlex doesn't waste its own waste it creates and recycles its own plastics and also recycles the waste generation from its own raw material sourced. RIL converts annually two billion post-consumer PET bottles into fibres apart from running awareness drives for waste segregation at source and efforts towards cleaning Mumbai's Methi River. The first step of performance management without being over ambitious is the compliance step. Readers would be benefited if they understand that compliance has to be also the first step of the governance exercise.

6. COMPLIANCE

Compliance in simple English vocabulary means 'the state of being compliant' in business the extended form of the term would be "the Department of Business that ensures all government regulations are complied with". Normally the firms have a monitoring cell under the aegis of the board of Directors who account the initiative to be complaint. Carbon trading for the firm is the weakest compliance mechanism and is an 'outside inside' mechanism for a polluting firm and with the years to follow will not remain so as the global exercise of Conference of Parties (COP) framework has started questioning the premise itself. It should be the Life Cycle Analysis that should be done with a Cradle-to-Cradle approach as against Cradle-to -Grave [16] Approach. The concept of Cradle -to -Grave is linear leading to incineration and landfills whereas the Cradle-to

- Cradle concept of DFE where waste concept is redundant at the time of disposal.

Compliance is having two purposes 1) reducing the probability of an incident of risk and 2) reducing the impact of the risk. Both are important for governance in the green business sector or the ensuring of sustainability. Resource Management basic tools encompass, waste minimization, energy efficiency and water conservation. And these can be combined into a single 'Resource Management Programme [17] these are executed through:

1. Auditing: gathering data, observing operations and behavior, and using tools such as mass balances to identify opportunities for improvement.
2. Maintenance: A good maintenance regime can eliminate resource loss.
3. Culture change and staff engagement is vital as many of the potential quick wins in an organization require different behaviour from employees.
4. Use of quick performance indicators and monitoring equipment/systems for monitoring resource use. These can identify sudden changes in resource use or inexplicable high consumption.

One finds that the ultimate icing on the cake of governance is based on the concept of the Ethics the firm would like to follow.

Feedback and Reporting in it hallmark of governance. Let one state the un-codified governance that exists in and among a small community in the Sunderban bio-reserve a well-known Bio- sphere Reserve and UNESCO World Natural Heritage Site (declared in 1987) and world's largest Mangrove forest [18]. The fishermen, the honey collector, the forest product collectors worship 'Bon Bibi' as they know the unknown code of maintaining a balance between their need (human need) and the nature and agreeing to do so. It is governed by the folklore of Sunderban region 'Banbibir Jahuranama' [19]. This 'Banabibir Jahuranama' narrates

that a sage living in the forest turned greedy and refused to share any of the forest resources with other human beings. Through his ascetic power, he took

The form of tiger and called 'Dakshin Rai'. He attacked humans who entered the forest. He legitimized the killing as tax payment with life for the produce usurped from the forest. Therefore the dominance of 'Dakshin Rai' remained unchallenged. God chose a young girl 'Bon Bibi' who lived in the forest. The folklore describes how Bon Bibi saved Dukhee, a poor boy from the clutches of Dakshin Rai. The story narrates that after saving Dukhee from Dakshin Rai, Bon Bibi that nothing more should be extracted from the forest than what is needed to survive. The governance principle as 'BanbibirJahuranama' is a light house in alerting us to avoid a path of extraction of resources and leakage of local economy. The ethics that framed this reporting was 'Conservation Ethics'. Therefore, for the readers understanding the bases of feedback and reporting is essential.

7. FEEDBACK AND REPORTING

It depends on the wisdom of the individual/group /institution(s) in charge of the governance in the use of the approaches of ethics. Here in while we focus on this paper the ethics in sustainability are the following as enumerated below [20].

The three approaches are the following.

1. The libertarian extension- The concept of individual rights is extended to all human non-human animals and possibly in inanimate entities. This means that all individual entities should be given the right to an uninterrupted freedom of existence. Some ecologists would extend the concept to include all ontological things (i.e., beings and objects that actually exist). The interpretation means that a being does not have to possess an intrinsic value (alternatively expressed as consciousness) to have an ethical value.
2. Ecological extension-Emphasis is not placed upon individual rights but upon interrelatedness of all entities in the geophysical structure of the planet and their essential diversity. This approach is referred to as 'eco-holism' and is exemplified in Gaia hypothesis proposed by James Lovelock.
3. Conservation ethics- In this approach, emphasis is placed on ecological conservation for the benefit of humankind. The environment has an instrumental value in which it is not seen as an end in itself, but a means of gaining pleasure and profit. This is the most common form of moral reasoning over the environment and the most common dictate of environmental policy.

Having stated that ethics is followed while documenting the feedback and executing it depends largely also on the individual and the gravitating force sometimes not visible to the source and the limitations of data collected or observed and the systems of bounded rationality.

8. CONCLUSION:

Industry rarely has a role to play in the framing of ordinance or acts in the parliament while it is the polity guided by the votaries who have the say and decide on the zone of agreement. Thus industry is evaluated based on the governance they exhibit and the positive externality they effulge on the society through a well negotiated balance between the innumerable pollutions laws sometimes confusing but normally manageable. The above stated governance principles help it

to be relevant both for the Government and the society of the world where green is governed not only by conservation ethics but equally by libertarian and ecological extensions.

REFERENCES:

1. Mark B. Governance: A very short introduction, Oxford University Press, Oxford, U.K.; 2012
2. Michael S. Delectable Materialism: Were the critics of consumer culture wrong all along?" The American Prospect.1991;5:26-35.
3. Srestha B. How India can meet its Glasgow Promise, TOI. November 4, 2021.
4. Vibhav C. Blueprint for a Green Print; the Edit Page, ET, November 2, 2021.
5. Arun TK. Lets aim for zero by 2060, ET Edit page, October 27, 2021.
6. Chandra B. Become Climate Champions, the Times of India, Saturday, March 6, 2021.
7. Xavier MJ. Marketing in New Millenium, S.C. Chand Publication, New Delhi; 1999
8. Antonides G, Raaij V. Consumer Behaviour: An European Perspective. John Wiley & Sons, Chichester; 1998
9. Trucy LT, Solmon, Micheal R. Socia Media Marketing, Sage Publication India. Pvt. Ltd, New Delhi; 2015, pp.16.
10. Jason G. Green Meat: The next climate-safe proposal facilitated by Bill Gates; <http://depaulia.com> appeared in April 13, 2021 and accessed on November 21, 2021.
11. Kim WC, Renee M. Blue Ocean Strategy; Harvard Business Press, Massachusetts; 2004.
12. ET Bureau; Oppose Fish Sops Removal Proposals at WTO, Says Bharatiya Mazdoor Sangh, ET, November 23, 2021
13. Robert KS, Norton PD. Balanced Score Card, Harvard Business Press; 1996.
14. Ghosh A, Choudhary A. Greening the Green Back, Economic Times, Kolkata, July 23, 2020.
15. Suchetana R. Resuming the Battle against Plastic; E.T. January 12, 2021. p.7
16. Starting A. Greening the Product Portfolio in the book by Kane Gareth 'The Green Executive' Earth Scan Publication, Great Britain; 2011, p.144.
17. Gareth K. The Green Executive, Earth Scan Publication, Great Britain; 2011, p.117.
18. Suvasis S. Ecotourism in Sunderbans, A marketing perspective, Department of Business Management (under DRS Programme Phase3), University of Calcutta; 2008. P.8.
19. Amitava B. The Tale of Bon Bibi, Economic Times, December 8, 2021.
20. Holden A. Environment and Tourism, Routledge, New York, 2000, p.52.