

THE ROLE OF GOVERNMENT IN PROMOTING SUSTAINABILITY DRIVEN PRIVATE SECTOR INVESTMENTS

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Abstract

The burgeoning pace of population growth coupled with rapid economic growth has placed huge pressure on the demands for natural resources and infrastructure. The threats of environmental, social and economic challenges have never been greater than in the year 2020. Worldwide, the scope of government action and calls for more governmental planning, intervention and spending is on the rise. However, despite a greater understanding of the role of government in social services delivery and the environmental challenges that the Earth faces, the numbers are dismal. 23% percent of the global urban population lives in slums still and greenhouse gas emissions are still rising (UN, 2018). Overcoming these challenges requires a concerted effort- one that involves existing stakeholders and makes way to include new ones. While governments alone cannot do it all, it is perhaps best positioned through its outreach to become a game changer by putting in place the right policies for more and newer stakeholders.

Keyword: sustainability, government, public policy, government action, private investments

Introduction

SECTION 1- THE CHANGING ROLE OF GOVERNMENT

As the world's economies transform to knowledge-based industries, there is a concomitant transformation in the role of government. The role of the government has undergone tremendous expansion during the 18th and 19th centuries. Barbier (2010) and Brown (1991) have documented the role of a modern nation state as a key evolution in the functions of a government. In his seminal work, the father of modern economics, Adam Smith (1776) mentions key areas of government work- national defense, administering justice and looking after law and order, and providing certain public goods and services. Musgrave in his Theory of Public Finance (1959) expands on

this role in the context of allocative efficiency, distributive efficiency, regulatory efficiency and stabilization policies.

Joseph Stiglitz (1997) has identified six key roles of any government. The first is promoting education as best exemplified by the USA and East Asian economies while the second is promoting technology. The third role of government is in supporting the financial sector which is responsible for deploying scarce capital resources in the most efficient way and the fourth one is in investing in infrastructure, including institutions as well as roads and communications systems. The fifth role of government is in preventing environmental degradation. And finally, the sixth is in creating and maintaining a social safety net, including access to basic health services.

Stiglitz spotlights the unique challenges that developing, and transition economies face where more markets are lacking, the markets that do exist may function less effectively, and information problems are more severe than in industrial countries simply because of the rapid change in the economic environment. To add to this difficulty, although market failures loom larger in developing and transition economies, the capacity of the governments there to correct these market failures is often weaker. Assessing the appropriate role of government requires recognition of both the need for and the limitations of government action.

While the role of government is not static, it is also a widely held belief that governments should act as catalysts for change. So, on one hand, changes in the economic environment profoundly modify what the government can and should do, governments are viewed as responsible for economic and general welfare of the people, and overall socio-economic development. It is expected to champion and establish the speed for transformation, establish requisite statutory structures to protect the environment, and make resources available.

From an environmental standpoint, Jabareen (2009) brings out the key issue in the debate which is how to strike a balance between environmental protection and economic growth. Waldt (2016) writes that without a growing economy a country cannot prosper and fulfil the needs of its citizens. Also, that without the protecting the environment, the country ceases to be safe and habitable.

The burgeoning pace of population growth coupled with rapid economic growth has placed huge pressure on the demands for natural resources and infrastructure. Fiorino (2012) mentions that it has become crucial for governments to find efficient ways of managing these demands, the twin challenges of regulatory actions to protect the environment and at the same time facilitate economic growth. Daly (1973) calls it a “steady-state”, which Rees (2014) infers as a near-constant rate of energy and material throughout and that is compatible with the production and assimilative capacities

of the ecosphere. So, governments, in today’s world, must establish and adhere to international protocols, conventions, and treaties as well as develop special support strategies and programmes to enable sustainable development (Waldt, 2016).

SECTION-2 RATIONALE FOR PRIVATE SECTOR IN ECONOMIC ACTIVITIES AND TRENDS IN PRIVATE SECTOR INVESTMENT

Private investment is often a catalyst for economic and human development. Under proper conditions, it fosters job creation and helps in the growth of local firms, suppliers, and distributors by creating demand and a marketplace for their products and services. It can improve access to and thus the standard of infrastructure and services critical for the event of entrepreneurship and tiny businesses besides banking and finance.

While most investment is undertaken by domestic companies, international investment are often advantageous. It can encourage innovation and stimulate productivity growth by bringing in or generating new information and technologies – like through knowledge-intensive activities of research and development. It can help in creating awareness of new technologies and expertise, probably by facilitating the creation of business linkages and by providing improved access to international markets and global value chains.

Forbes India, in its article, “Financing Sustainable Development Goals: How should India inspect private investments for development?” (2017) discusses about how investment can improve the human resource base by fueling the event of skills within the host economy through educational and training programs to satisfy market needs. Companies are also increasingly driving the efforts to reinforce the sustainability of their operations and contribute to sustainable development. Responsible investors that respect international standards of responsible business conduct can help to spot and answer risks of adverse impacts related to products, regions, sectors, or industries.

There are many practical examples of the facility of investment to accelerate economic development. In a paper, “Investment for Sustainable Development” (2015), published by OECD, it is mentioned that in Southeast Asia, it is private investment and trade have been the main drivers of development. In some cases, however, this has not converted into lasting success and inclusive development, partly due to a lack of appropriate policy frameworks to support sustainable development through investment. Despite the general recognition of the development potential of investment, it remains unrealized in many parts of the world. The relationship between rise in FDI in developing countries and increase in sustainable development has not been fully established, empirically.

SECTION 3- THE NEED OF THE HOUR- SUSTAINABLE DEVELOPMENT

Hellstrand et al (2009) define sustainable as social and economic development within ecological sustainability limits. Barrow (2020) integrates development and environment by explaining sustainable development as development that seeks to stretch what nature provides to the optimum and to maintain that improvement indefinitely without environmental breakdown in order to maximize human wellbeing, security, and adaptability. He further adds that the concept of sustainable development is now established, the interpretation varies and the tools, policies, and methods for practical implementation are evolving. Sneddon et al (2006) further elaborate this when they state that the concept and practice of sustainable development—as guiding institutional principle, as concrete policy goal, and as focus of political struggle—remains salient in confronting the multiple challenges of this new global order.

Sustainable Development has been on the agenda of various organizations including governments, international agencies as well as local bodies officially since 1983 when the Report of the World Commission on Environment and Development: Our Common Future was published. Nearly four decades after the publication of *Our Common Future*, the

world's political and environmental landscape has changed significantly (Sneddon, 2006). As correctly pointed by Barrow (2020), laissez-faire development, although largely the norm, is unwise in a crowded and vulnerable world. The threats of environmental, social and economic challenges have never been greater than in the year 2020. Worldwide, the scope of government action and calls for more governmental planning, intervention and spending is on the rise. However, despite a greater understanding of the role of government in social services delivery and the environmental challenges that the Earth faces, the numbers are dismal. 23% percent of the global urban population lives in slums still and greenhouse gas emissions are still rising (UN, 2017). To overcome these challenges requires a concerted effort- one that involves existing stakeholders and makes way to include new ones. While governments alone cannot do it all, it perhaps is best positioned through its outreach to become a game changer by putting in place the right policies for more and newer stakeholders.

SECTION-4 THE ROLE OF GOVERNMENT AND PRIVATE SECTOR IN SUSTAINABILITY

In his article, Van der Waldt (2016) outlines, where investment does occur, the local economy doesn't always possess the capacity and policy tools to reap the potential benefits of private investment. In low-income country like India, which doesn't have the systems for well-integrated approaches required to reap benefits from these investments, productivity gains are often limited, and incentives incapable to encourage innovation. The Indian informal economy is sizeable, unprotected, unregulated and un-taxed. It also makes an impediment for those in the the informal economy to benefit from support programs.

Payne and Phillips (2010) as well Hopper (2012) correctly point out that without a growing economy, a country cannot prosper and fulfil the wants of its citizens. On the other hand, without the protection of the environment, citizens of a country won't have a healthy and safe place during which to live and may not have access to

clean water, air, and soil. Governments need to come up with strategies for sustainable development, which combine social, economic, and environmental concerns in planning and management towards sustainability (Dodds 2000). Thus, Pearce et al (1989) correctly conclude that governments should strike a balance between the necessity for economic process, social development, and therefore the protection of the environment.

Responsible business conduct is an important part of today's open trade and investment climate, given increasingly global nature useful chains. It is also important in driving sustainable development and ensuring that enterprises create long-term value for the societies in which they operate. Government is predicted to play an instrument in bridging this gap for promoting quality investment to support national and regional development objectives and CSR is merely a contributor there too. There is a greater scope to reinforce investments from the private sector for development (Sharma, 2017).

SECTION-5 POLICIES TO DIRECT PRIVATE SECTOR INVESTMENTS IN SUSTAINABILITY INTERNATIONAL PERSPECTIVE

The private sector plays an important role in supporting sustainability in the developed world. As a result, there is an increasing emphasis on development co-operation providers to integrate private sector engagement approaches into their programmes on sustainability. This section provides an international overview of activities in this area:

Sustainability, in Denmark, is a comprehensive approach that features waste recycling, water management, renewable energy, and green transportation incorporating the bicycling culture.

For centuries, Denmark has been a society based on agriculture and fishing, and Danes still feel closely associated to the land and the water around them. This admiration for nature is why

Denmark is a pioneer in promoting sustainability (Denmark.dk).

30 years of earnest energy policy has set Denmark at the forefront in the development and use of renewable energy. State of Green's (2020) article "Sustainability is becoming a part of Danish private sector DNA" takes an example of SAS or Scandinavian Airlines which announced a new sustainable strategy focused on acquiring new and more efficient aircrafts, using more biofuel and CO₂ compensation. Following this strategy, the airline expects to reduce greenhouse gas emissions by 25% by 2030. The strategy aims to make SAS the most sustainable airline in the world. Denmark announced a target to achieve 100% renewable energy by 2050. Currently, 40% of their energy is generated by wind turbines. The cycling culture is prevalent across the country. This successively, has contributed to clean air-quality.

France has historically been at the forefront of eco-friendly projects and regulations. The French government has actively supported clean technology using government subsidies. At present, 30% of energy is being generated from renewable sources. Further, they also plan on disposing cars running on diesel to scale back particle pollution. Wapplehorst's (2020) article explains a new cost system, Bonus-malus, introduced in 2019 to tackle plastic pollution where in the price of items packaged in non-recycled plastic could soar up to 10%, while the price of products sustainably packaged could drop up to 10%.

Policy measures are established to support France's intention to electrify its vehicle fleet. Robust fiscal measures currently in order include:

- Greenhouse gas based 'bonus-malus' vehicle tax when purchasing a new vehicle.
- 'Malus' (tax) when buying a high-emitting second-hand vehicle.
- Conversion bonus for scrapping an old high-emitting vehicle in favour of a

replacement or used low-emitting vehicle.

- Both fully electric and plug-in hybrid vehicles are eligible for either a 50% discount or are exempt from the license plate tax depending on the region. Additionally, electric vehicles are exempt from the company car tax.
- Car manufacturers are incentivized to invest additionally in developing more efficient vehicles and electric automobiles (ICCT, 2018).

Dévé's (2019) explains that the French government, together with the private sector, has commenced a journey to be green and sustainable. The French Ministry of Environment, Energy, and the Sea launched GreenTech, an incubator to assist 50 start-ups in developing sustainability services and applications. Competitiveness clusters are making significant contributions to the "post-carbon" economy through the development of eco-technologies.

Iceland is among the most sustainable countries in the world due to fine water quality, reduced air pollution, and an effective climate change policy. Almost all the electricity consumed comes from renewable energy. Geothermal land hydro power generation justifies the energy transition in Iceland. The drive behind this transition was because Iceland could not sustain oil price fluctuations occurring due to several crises affecting world energy markets. It needed a stable and economically feasible domestic energy resource for its isolated location on the edge of the Arctic Circle. Currently, 9 out of every 10 houses are heated directly with geothermal energy (Logadóttir, 2017).

Swedish innovators are advancing in technologies, with the goal of running on 100% renewable energy and recycled sources. In Lola Akinmade-Åkerström's (2020) article, seven examples of Sustainability in Sweden" are:

- "Passive houses" using heat from human activities and sunlight were constructed to cut

back energy consumption. A prime example is of the Stockholm's Central Station, which captures body heat from daily commuters. This idea is additionally employed in district heating for blocks of apartment buildings.

- Country's reduced greenhouse gas emissions can be attributed to its shift from oil to district heating in the early 1990s.
- Centralising the way buildings temperatures are regulated through a main source implies that the central plant can be advanced to use more sustainable and clean forms of fuel.
- Sweden plans to become the world's first fossil-fuel free nation as part of their allegiance to Roadmap 2050. The Swedish government will invest USD 633 Million in solar and wind energy, smart grids, and clean transport. The budget increase will be financed through heavy taxes on fuel, airport and nuclear plant closures and the sale of coal mines. (Brittlebank, 2015)

Leader within the world of sustainability, where waste and recycling management is a priority, all waste is properly disposed of and the remaining is turned into energy. The article, "Key aspects of environmental protection in Switzerland", published by House of Switzerland (2020) reflects on Switzerland's commitment to sustainability and points out three interesting developments-

- Most of the energy used in Switzerland is obtained from hydroelectric power, the rest is obtained through nuclear power plants and results in low carbon footprint.
- The Swiss strive to preserve water-quality and maintain biodiversity by protecting land and designating as National Parks.
- To preserve good air quality, Switzerland reinforces the development and implementation of environmentally friendly technologies.

Sustainable Development Strategy 2016-2019 mentions that the Sustainable Development

Strategy (2016–2019) consisted of a solid action plan, structured into nine thematic areas of action in the priority fields for sustainable development. These priorities are based on the general focus areas of overall federal government policy, on the objectives determined by the 2030 Agenda, as well as on the outcomes of the stakeholder discourse.

According to “Switzerland’s Top 8 Sustainable Investment Approaches”, by Douglas (2018), Switzerland has achieved positive sustainability outcomes using the following investment approaches through sustainable thematic investments in clean energy and impact investing in private projects in emerging markets, which are characterized by a lack of diversification, low liquidity, and high-risk factor.

SECTION-6 THE INDIAN POLICY EFFORT AND ANALYSIS

United Nations High Level Political Forum’s report, “Voluntary National Review Report on Implementation of Sustainable Development Goals” (2017) identifies India as the fastest growing major economy of the world. India is uniquely placed to deliver on its commitments to inclusive and sustainable development. Externally the country has played a key role in shaping the SDGs and ensuring the balance among its three pillars - economic, social and environmental. Internally, it has launched many programs to make progress towards these goals.

Electric Vehicles - Government plans to supply \$4.6 billion in incentives to companies setting up battery manufacturing facilities to promote the use of electric vehicles and cut down dependence on oil. According to the article, “Delhi Government’s Electric Vehicle Policy: Paving the road for EVs” by The Financial Express (2020), the EV policy of the Delhi government is aimed at registration of around five lakh electric vehicles in the city in the next five years. Incentives include Rs 1.5 lakh incentive for the first 1,000 electric cars; upto Rs 30,000 for two-wheelers and autos, scrapping incentives for old fossil-fuel vehicles (including CNG-powered) and waiver of road tax and registration charges. Apart from these, the policy

puts the onus on the NCT government to drive EV adoption too. This aims to significantly reduce pollution in Delhi as well as national savings in terms of decreased fossil fuel imports.

Through the policy, the government is striving to create the support infrastructure—charging points, battery disposal, etc. While the first 30,000 private charging points will receive an incentive of Rs 6,000 each, the policy envisions creation of public charging and battery swapping points every three kilometres throughout the city, with modicum lease rentals for companies to set these up and full refund of SGST for purchase of swappable batteries by them. It also aims to make a recycling ecosystem, involving battery and EV manufacturers that have the capacity to extract reusable matter from spent batteries.

Plastic Ban - In June 2018, Prime Minister Narendra Modi announced that India would eliminate single-use plastics by 2022. A notable measure in that direction was Extended Producer Responsibility (EPR) under the Plastic Waste Management Rules, 2016 as a part of which, producers, importers, and brand owners are to take back the plastic waste generated by their products, with the assistance of waste-management companies (The Mint, 2019.) Companies are shifting to single-polymer packaging, which would make it recyclable.

Renewable Energy - The Ministry for New and Renewable Energy (MNRE) has urged states to provide incentives for setting up designated manufacturing hubs in India as number of renewable energy manufacturers are planning to shift base from China to diversify their supply chains in the wake of the Covid-19 pandemic. These hubs will manufacture equipment such as solar cells and modules, wind equipment and other ancillary items like back sheet, glass, steel frames, inverters, and batteries. Imports fulfil 85% of the country’s demand for solar cells and modules. The government had earlier imposed basic customs duty on such imports to promote indigenous production and usage of solar parts. MNRE decided to provide custom and excise duty benefits to the solar rooftop sector, which will lower the cost of setting up as well as

generate power, thus boosting growth (The Economic Times, 2020).

Namami Gange - 'Namami Gange Programme', is an Integrated Conservation Mission, approved as 'Flagship Programme' by the Union Government in June 2014 with budget outlay of Rs.20,000 crore to accomplish the dual objectives of effective abatement of pollution, conservation, and rejuvenation of National River Ganga.

The Print's article (2020) "Adani, Shapoorji Pallonji group among private players lining up to clean Ganga", mentions the private companies contributing towards sustainability. The companies include the Adani Group-Organica consortium, which was awarded two projects worth over Rs 1,600 crore for sewage treatment work in Uttar Pradesh. The Adani Group has also bid for a third project worth over Rs 250 crore in Bihar. The Shapoorji Pallonji Private Limited won three bids, involving an investment of over Rs 1,100 crore for developing a new Sewage Treatment Plant and other sewage treatment work in Uttar Pradesh. Other private players who have been awarded projects include Essel Infraprojects Limited, Triveni Engineering & Industries Limited.

World Bank Blogs published an article "India: Cleaning up the Ganga with private sector support" (2017) which gives a brief information on incentives provided by the National Mission for Clean Ganga (NMCG). NMCG has awarded the projects under the hybrid annuity model (HAM) — a public-private partnership where the government pays 40 per cent of the capital during the construction period while the developer invests the remaining 60 per cent. The remaining costs would be paid in annuities over a 15-year period to private operators, alongside operation and maintenance costs. Payments would be linked to performance of the treatment plants. This arrangement provided positive incentives for both government and private operators in the success of the project and ensured sustainable performance of the plants for a minimum of 15 years.

The Hindu's article, "Firms buy private land for afforestation" (2017), briefed about the afforestation and rehabilitation of degraded forest lands - The forest panel of the Indian government's environment ministry has approved guidelines that would allow private industries to be involved in the creation of plantations on degraded forest land. This involves participation of the private sector through involvement of non-governmental organizations and forest department in afforestation and rehabilitation of degraded forests.

According to The Hindustan Times' (2020) article, "Compensatory afforestation process may be overhauled", to take up compensatory afforestation, some companies are buying private land from farmers in Belagavi district to replace forestlands that they have used for industrial and other purposes. Jindal Steel Works has informed the district administration that it will buy over 800 acres of private land at Gavali village in Khanapur taluk by issuing advertisements in newspapers inviting objections, if any. EcoGen developers and consultants recently made an agreement with farmers to buy over 200 acres of land in Hulnad village in Belagavi district to compensate for the forestland diverted for a wind power project near Davangere.

The plantation will be eligible for compensatory afforestation three years after it has been raised if it meets a "predetermined criterion of success". This plantation can then be traded with the project developer and the price negotiated between the company raising the plantation and the developer. If the company raising the plantation doesn't wish to trade, it can retain it and harvest the timber once ready. This will hasten afforestation work and carbon sequestration to address the concerns of climate change.

Farm Forestry is for better-off farmers who can invest in growing pulpwood plantations. The programme brings multiple benefits to multiple stakeholders. Plantation incomes are significantly higher, especially beneficial for

poor farmers, helping them to step away from penury and deprivation. For Indian paper producers, the plantations create a raw material source that is local, renewable, and responsible. They also contribute to expanding the country's green cover thereby enabling large scale sequestration of CO₂, enriching depleted soils and replenishing groundwater.

SECTION 7- CONCLUSIONS

This overview of various practices by governments to encourage sustainable initiatives shows that the road is uneven and unpredictable, but insurmountable. John Robinson and Jon Tinker (1997) have identified three dimensions of sustainability- ecology (nature/environment), economy, and society, as three “interacting, interconnected, and overlapping prime systems”. Each system is essential for the collective survival of a society and humankind in general. Private investments have a huge role to play in this movement towards sustainable development. The role of the government though is the most noteworthy, that of a true leader, a torch bearer and a guardian.

REFERENCES

- [1] Akinmade-Åkerström, L. (2020). “7 Examples of Sustainability in Sweden”. <https://sweden.se/nature/7-examples-of-sustainability-in-sweden>. Extracted: 7th December, 2020.
- [2] Barbier, E.B. (2010). “Poverty, development and environment”. *Environment and Development Economics*. 15(1): 635-660.
- [3] Barrow, C.J. (2020). “Sustainable Development.” In *The International Encyclopedia of Anthropology*, H. Callan (Ed.). <https://doi.org/10.1002/9781118924396.wbiea1463>
- [4] Brittlebank, W. (2015). “Sweden to become world’s first fossil-fuel free nation”. <https://www.climateaction.org/news/sweden-to-become-worlds-first-fossil-fuel-free-nation>. Extracted: 7th December, 2020.
- [5] Brown, L.R. (1991). “The State of the World”. Washington, DC: Worldwatch Institute.
- [6] Daly, H.E. (1973). “Towards a steady state economy.” San Francisco, LA: Freeman
- [7] Denmark.dk. “Sustainability in Denmark”. Sustainability in Denmark | The pioneer in promoting sustainability. <https://denmark.dk/innovation-and-design/sustainability>. Extracted: 7th December, 2020
- [8] Dévé. (2019). “France’s New Goals? Liberty, Equality, Fraternity- and Sustainability”. <https://www.pcma.org/frances-green-goals-sustainability-equality/>. Extracted: 7th December, 2020
- [9] Dodds, H.S. (2000). “Pathways and paradigms for sustaining human communities.” In Lawrence, R.J. *Sustaining human settlement: A challenge for the new millennium*. London: Urban International Press. pp. 28-54
- [10] Douglas, A. (2019). “Switzerland’s Top 8 Sustainable Investment Approaches”. <https://medium.com/swlh/switzerlands-top-8-sustainable-investment-approaches-29116fac3849>. Extracted: 7th December, 2020
- [11] Fiorino, D.J. (2012). “Sustainable cities and governance: What are the connections?” Centre for Environmental Policy. Working Paper 2. Pittsburg, PA: University of Pittsburg Press.
- [12] Forbes India. (2017). “Financing Sustainable Development Goals: How should India inspect private investments for development?” Extracted: 7th December 2020
- [13] Hellstrand, S., Skånberg, K. and Drake, L. (2009). “The relevance of ecological and economic policies for sustainable development.” *Environ Dev Sustain* 11, 853–870 (2009). <https://doi.org/10.1007/s10668-008-9156-1>
- [14] Hopper, P. (2012). “Understanding development: Issues and debates.” Cambridge: Polity Press.

- [15] House of Switzerland. (2020). "Key aspects of environmental protection in Switzerland". <https://houseofswitzerland.org/swissstories/environment/key-aspects-environmental-protection-switzerland>. Extracted: 7th December 2020
- [16] ICCT. (2018). "Practical lessons in vehicle efficiency policy: The 10-year evolution of France's CO2-based bonus-malus feebate system". <https://theicct.org/practical-lessons-in-vehicle-efficiency-policy-the-10-year-evolution-of-frances-co2-based-bonus-malus-feebate-system/>. Extracted: 7th December, 2020
- [17] Jabareen, Y. (2009). "Building a conceptual framework: Philosophy, definitions, and procedure." *International Journal of Qualitative Methods*. 8(4): 48-62.
- [18] Logadóttir, H.H. (2017). "Iceland's Sustainable Energy Story: A Model for the World?". *Iceland's Sustainable Energy Story: A Model for the World?* Extracted: 7th December, 2020
- [19] Musgrave, R.A. (1959) *The Theory of Public Finance*. McGraw-Hill. 1959.
- [20] OECD. (2015). "Investment for Sustainable Development", extracted: 7th December, 2020. <https://www.oecd.org/dac/Post%202015%20Investment%20for%20sustainable%20development.pdf>
- [21] Payne, A. and Phillips, N. (2010). "Development." Cambridge: Polity Press
- [22] Pearce, D. W., Markandya, A., Barbier, E., & Great Britain. (1989). *Blueprint for a green economy*. London: Earthscan.
- [23] Rees, W.E. (2014). "Avoiding Collapse: An agenda for sustainable degrowth and relocalizing the economy." *Canadian Centre for Policy Alternatives*. https://www.policyalternatives.ca/sites/default/files/uploads/publications/BC%20Office/2014/06/ccpa-bc_AvoidingCollapse_Rees.pdf. (Accessed on 5 May 2016)
- [24] Robinson, J. and Tinker, J. (1997). "Reconciling Ecological, Economic, and Social Imperatives: A New Conceptual Framework." 10.1007/978-1-349-25648-8_5.
- [25] Sharma, A. (2017). "Financing Sustainable Development Goals: How should India look at private investments for developments?" <https://www.forbesindia.com/blog/economy-policy/financing-sustainable-development-goals-how-should-india-look-at-private-investments-for-development/> Extracted: 7th December, 2020
- [26] Smith, A. (2002). *The Wealth of Nations*. Oxford, England: Bibliomania.com Ltd
- [27] Sneddon, C. Howarth, R. B. and Norgaard, R. B. (2006). "Sustainable development in a post-Brundtland world." *Ecological Economics*, Volume 57, Issue 2, 2006, Pages 253-268
- [28] State of Green. (2019). "Sustainability is becoming a part of Danish private sector DNA", Extracted: 7th December 2020
- [29] Stiglitz, Joseph E. (1997). "The Role of Government in Economic Development." In Michael Bruno and Boris Pleskovic, eds., *Annual World Bank Conference on Development Economics*
- [30] Swiss Federal Council, *Sustainable Development Strategy 2016–2019*, 27th January 2016
- [31] *The Economic Times*. (2020). "MNRE urges states to set up renewable energy equipment parks, make India global hub". <https://economictimes.indiatimes.com/industry/energy/power/mnre-urges-states-to-set-up-renewable-energy-equipment-parks-make-india-global-hub/articleshow/75216453.cms>. Extracted: 7th December, 2020
- [32] *The Financial Express*. (2020). "Delhi Government's Electric Vehicle Policy: Paving the road for EVs". <https://www.financialexpress.com/opinion/delhi-governments-electric-vehicle-policy-paving-the-road-for-evs/2055614/>. Extracted: 7th December, 2020
- [33] *The Hindu*. (2017). "Firms buy private land for afforestation". <https://www.thehindu.com/news/national/>

- karnataka/ firms-buy-private-land-for-afforestation/ article 19033784.ece. Extracted: 7th December 2020
- [34] The Hindustan Times. (2020). “Compensatory afforestation process may be overhauled”. [https://www.hindustantimes.com/india-news/compensatory-afforestation-process-may-be-overhauled/ story-0BPfVOz9RIe9XqBiJ Dh3iI.html#:~: text=The%20ministry %20plans%20 to%20 overhaul, involving %20diversion%20of%20forest%20land.](https://www.hindustantimes.com/india-news/compensatory-afforestation-process-may-be-overhauled/story-0BPfVOz9RIe9XqBiJ Dh3iI.html#:~: text=The%20ministry %20plans%20 to%20 overhaul, involving %20diversion%20of%20forest%20land.) Extracted: 7th December, 2020
- [35] The Mint. (2019). “Government plans to put companies using plastic on the radar”. <https://www.livemint.com/news/india/government-plans-to-put-companies-using-plastic-on-the-radar-11570012506099.html>. Extracted: 7th December, 2020
- [36] The Print. (2020). “Adani, Shapoorji Pallonji group among private players lining up to clean Ganga”. <https://theprint.in/india/adani-shapoorji-pallonji-group-among-private-players-lining-up-to-clean-ganga/350770/>. Extracted: 7th December, 2020
- [37] United Nations Environment Programme, 2019, “Costa Rica named ‘UN Champion of the Earth’ for pioneering role in climate change”, Extracted: 7th December, 2020
- [38] United Nations High Level Political Forum. (2017). “Voluntary National Review Report on Implementation of Sustainable Development Goals”. https://sustainable development.un.org/content/documents/26281VNR_2020_India_Report.pdf. Extracted: 7th December, 2020
- [39] Van der Waldt, Gerrit. (2016). “The Role of Government in Sustainable Development: Towards a Conceptual and Analytical Framework for Scientific Inquiry.” *Administratio Publica*. 24. 49-72, Extracted: 7th December, 2020
- [40] Wapplehorst, S. (2020). “Actions speak louder than words: the French commitment to electric vehicles”. <https://theicct.org/actions-speak-louder-than-words-the-french-commitment-to-electric-vehicles/>. Extracted: 7th December, 2020
- [41] World Bank Blogs. (2019). “India: Cleaning up the Ganga with private sector support”. <https://blogs.worldbank.org/ppps/india-cleaning-ganga-private-sector-support>. Extracted: 7th December 2020
- [42] World Commission for Environment and Development. (1987). “Our Common Future.” *Brundtland Report (A/42/427)*. New York, NY: United Nations.
- [43] Zhang, D. and Pearse, P.H. (2011). “Forest economics”. Toronto: UBC Press.